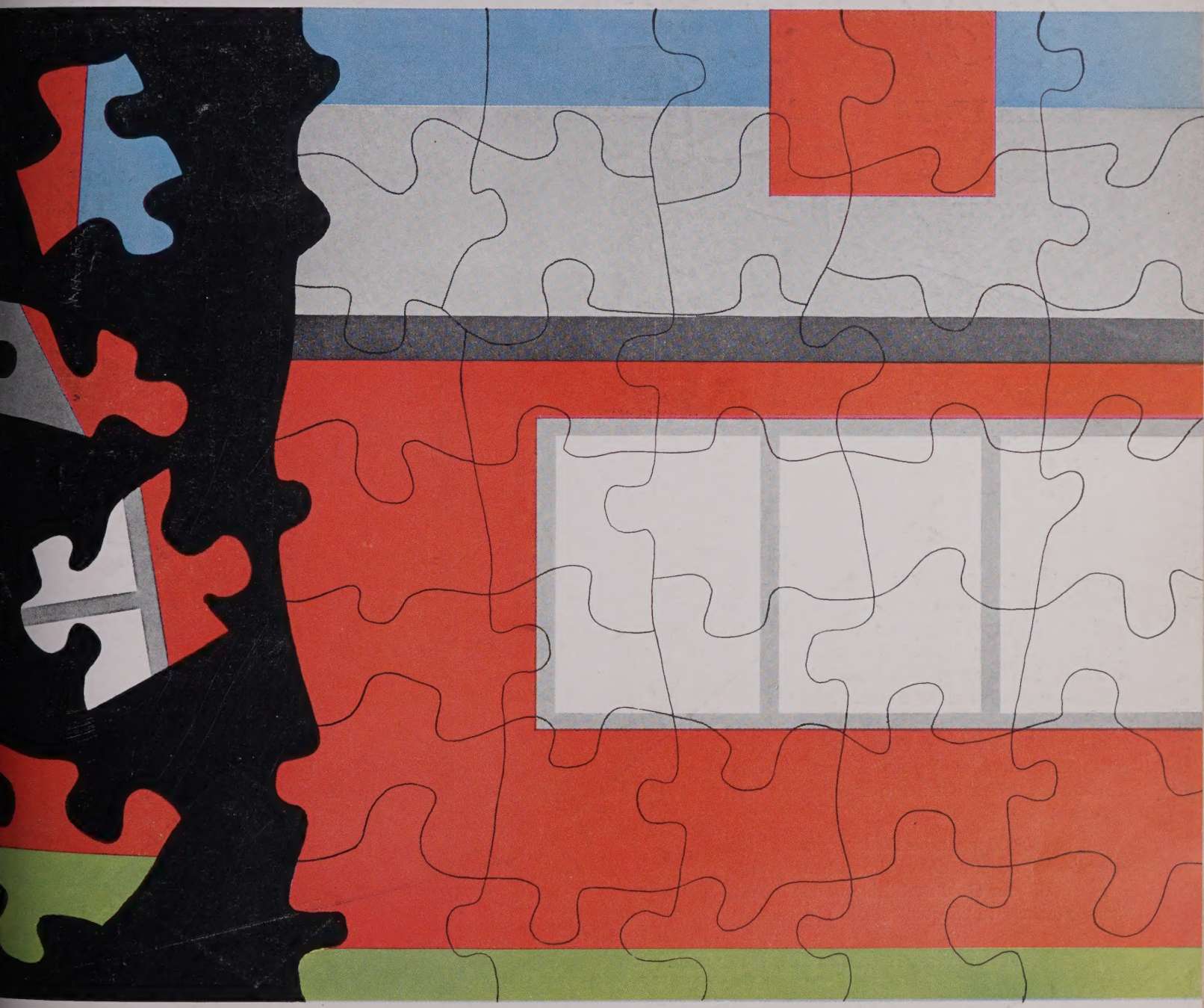
Illinois U Library

House & Home

JUNE 1956 SIX DOLLARS A YEAR—ONE DOLLAR A COPY



Will coordinated components solve the on-site builders' puzzle? – page 124

AIA judges choose the best 23 houses in the West – page 141

Women's Housing Congress: Did they know what they wanted? – page 138

Now the sewerless toilet opens up "unusable land" – page 162

On the way: New uses for metals in tomorrow's house – page 166

For eye appeal plus sales appeal...

Gold Seal

INLAID LINOLEUM

in new decorator colors



T730
BEIGE,
accented with coral, green and brown

Popularity of the famous "Sequin" design grows by leaps and bounds. It can help you sell your homes faster. Home buyers are drawn to its full range of 16 beautiful colors—appreciate such "Sequin" advantages as...design inlaid clear through to the exclusive Gold Seal SuperFlex* backing...colors remain fresh and clear through years of wear...it stays smooth and resists indentations, unusually easy to clean!

With 18,000,000 magazine readers currently seeing the newest "Sequin" colors shown here, it will pay you to call your Gold Seal dealer today for the complete facts on "Sequin" Inlaid Linoleum.

T718
YELLOW,
accented with white and yellow

T720
PINK,
accented with rose and white

SPECIFICATIONS: Standard Gauge and ⅛" "Sequin"—
Install over suspended concrete or suspended wood subfloors—standard gauge—16 colors.
⅛" "Sequin"—burlap backed—7 colors.

ABRASIVE WHEEL TEST PROVES SEQUIN*
"LOOKS LIKE NEW" THROUGH LONG SERVICE LIFE!



The circular "After Test" area is the result of applying the abrasive wheel to the "Sequin" sample. See how it *has worn well through the linoleum*—and yet the pattern is still there, as clear and sharp as ever! Compare it with the "Before Test" area. You *can't tell the difference!* Write to Customers' Service Department, Congoleum-Nairn Inc., Kearny, N. J. for further information.

FOR THE LOOK THAT'S YEARS AHEAD

Gold Seal®
FLOORS AND WALLS

FOR HOME OR BUSINESS: INLAID BY THE YARD—Linoleum • Nairon* Standard • Nairontop*
RESILIENT TILES—Rubber • Cork • Nairon Custom • Nairon Standard • Vinylbest • Linoleum • Ranchtile® Linoleum • Asphalt
PRINTED FLOOR AND WALL COVERINGS—Congoleum® and Congowall®
RUGS AND BROADLOOM—LoomWeve*

*Trademark

© 1956 CONGOLEUM-NAIRN INC. KEARNY, N. J.

ROUNDUP

Does housing need another shot of easier terms?

Slumping housing starts revive talk of softening FHA and VA down payments. Last Christmas, the government restored 30-year VA mortgages to its books, but new no-down commitments have been banned since last July. The administration could lower the 2% down payment now required for new VA home loans and drop FHA's minimum down payment from 7% to 5% again.

Variable standards urged to ease community facilities woes

Builders should set up three voluntary standards for community facilities, thinks ex-NAHB President Tom Coogan—one standard for high-priced developments, one for middle-priced developments and one for low-priced developments. He feels one trouble builders run into when they fight unreasonable improvement requirements is that someone in the local government has been sold a bill of goods on a high standard and the builders cannot show any good alternative which has official sanction.

Can FHA permit buyers to pay discounts—voluntarily?

Topic A in Washington is how to offset the squeeze on FHA and VA loans because of the increasing price of money. Legally, FHA could hike its interest rate from 4½% to 6%. But VA is already at the 4½% ceiling imposed by a Congress which has always been peculiarly sensitive to pressure from veterans lobbies. So housing officials feel FHA is stuck with the VA limit.

Mortgage bankers asked FHA officials in New York for their eastern mortgage conference last month if they could permit home buyers—particularly individuals building their own homes—to pay discounts voluntarily. So far, FHA hasn't come up with an answer, though Deputy Commissioner Charles Sigety huddled with top MBA men on this and other problems.

One possible solution: since the law permits FHA to allow a fee to reflect the cost of putting a mortgage on a lender's books, discounts might be permitted by an administrative ruling that this was part of the cost of creating the mortgage.

Has labor's drive to organize home building fizzled?

Labor's big drive to unionize the building industry (Mar. News) apparently won't get off the ground this year. A top building trades official claims that labor never really planned a drive. He blames it all on "exaggerated reports" from the AFL-CIO building trades mid-winter meeting in Miami Beach in February. "Some people believed all the noise they heard from the floor," he says. "The truth is we just don't have the money to undertake a big organizational drive this year." NAHB, worried at first, now seems to agree there is no immediate threat of an organizing drive. The building trades real 1956 goal: to iron out AFL-CIO unification problems.

Kind words for H&H from across the sea

The *Architects' Journal,* weekly British trade magazine and sister publication of the highbrow *Architectural Review,* has delivered itself of comment-from-afar on the life and times of four-and-a-half-year-old HOUSE & HOME. Said the *Journal,* in its page one "Astragal" editorial column:

> "Astragal had his doubts when the American magazine, ARCHITECTURAL FORUM, split itself into two—FORUM, the Magazine of Building, and HOUSE & HOME. The reason for the split was an understandably commercial one—the publishers wanted to appeal to the enormous speculative housing industry. In spite of his original doubts, Astragal finds himself more and more impressed by the consistently high standard of HOUSE & HOME. It occasionally has top-grade architect designed individual houses, but for the most part it is concerned with the American speculative housing market in all its aspects, and one has to remember that most housing in America is built by private enterprise.
>
> "What is so impressive is that HOUSE & HOME has not been satisfied to follow the trends; it has led them. It has consistently put forward enlightened policies and examples. And it has consistently stressed the architect's contribution to building."

NEWS continued on p. 40

THIS MONTH'S NEWS

(index to the top stories)

Mortgage market: *worst pinch in years grips housing but August may bring easing.....p. 40*

Housing market: *1956 output of more than 1.2 million looks unlikely as starts fall.....p. 44*

New York home show *overshadowed by ruckus about make-work gouges by labor unions....p. 45*

Tax estimating *troubles in VA projects bring grand jury probe in southern California .....p. 49*

Housing bill *before the Senate would inflate federal intervention in housing market .....p. 55*

VA housing: *NAHB, in a major shift of policy, decides to press for merger with FHA .....p. 55*

State legislatures: *a roundup of what they did to housing at spring sessions .....p. 66*

Materials & prices: *central air-conditioning poised for a boom season .....p. 73*

Prefabrication: *brick men, architects attack prefab schools as more costly than conventionals..p. 84*

Conventions: *AIA studies how to bring better design to the suburbs of the nation .....p. 90*

Labor: *spring wage bargaining nets building labor boosts of 7 to 35¢ an hour .....p. 94*

Regular Departments

Mortgage quotations.p. 41
People .....p. 98
Opinions .....p. 102
Builders at Work....p. 103

All over America Builders use Ceramic Tile Sales Power

Adhesive Installations — key to Ceramic Tile "Showplace" areas

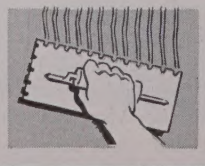
With home prices edging up, the discriminating cash buyer is demanding more. Ceramic tile, traditional mark of a quality home, offers the builder a perfect opportunity to give more convenience, more luxury. And adhesive installations are the way to offer *more* tile at *less* cost. Here are some of the ceramic tile "showplace" areas builders are using to help sell their homes faster:

- Utility room, with practical ceramic tile floors and walls.
- Ceramic tile drainboards, a real eye-catcher for Mrs. Home-buyer.
- Ceramic tile window sills, a bonus appreciated by every home-buyer.

Don't forget to ask your ceramic tile contractor about the savings made possible by adhesive installations. This type of installation is ideal for many dry-wall surfaces.

How Adhesive Installations cut your tiling costs

Mastic bed on dry-wall cuts down preparation time and costs.

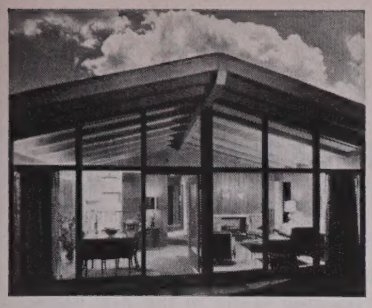


Tiles are set quickly and easily on mastic bed.



Job clean-up time is held to minimum.





Here's what leading builders like Robert P. Gerholz are doing with Tile →

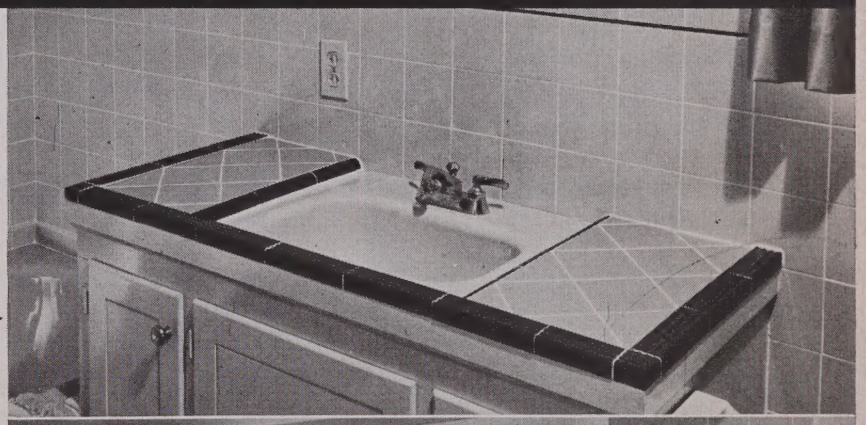
Gerholz Community Homes of Flint, Michigan built this best-seller home. "Open-planned" for indoor-outdoor living, this $22,950 house has the luxury feel that appeals to today's home-buyers.

Builder Gerholz used the modern adhesive method to install ceramic tile in this attractive bath. Eye-catching tile installations like these help the home-buying prospect make up his mind in a hurry—in favor of your home!



Holmes & Jensen's "Storage Wall" house has the Ceramic Touch! →

Holmes & Jensen of Salt Lake City, Utah have had great success with a $16,000 "open room" house featuring storage walls throughout. Holmes & Jensen used adhesive installations of ceramic tile in both bath and kitchen. Note the tiled lavatory counter tops and walls in the bath. The kitchen features an inviting cooking corner surrounded by gleaming tile. Holmes and Jensen feel that successful, *time-saving* adhesive installations are profitable because "in the construction of homes, time saved is money earned."





The Modern Style is

CERAMIC tile

TILE COUNCIL OF AMERICA, INC.

Room 3401, 10 East 40th St., N.Y. 16, N.Y. or Room 933, 727 W. 7th St., Los Angeles, Calif.

PARTICIPATING COMPANIES: American Encaustic Tiling Co. • Architectural Tiling Co., Inc. • Atlantic Tile Mfg. Co. • Cambridge Tile Mfg. Co. • Carlyle Tile Co. • Dover Ceramic Co. • General Tile Co. • Gladding, McBean & Co. • Jordan Tile Mfg. Co. • Mosaic Tile Co. • Murray Tile Co., Inc. • National Tile & Mfg. Co. Olean Tile Co. • Pomona Tile Mfg. Co. • Ridgeway Tile Co. • Robertson Mfg. Co. • Royal Tile Mfg. Co. Sparta-Ceramic Co. • Stylon Corp. • Stylon Southern Corp. • Summitville Tiles, Inc. • United States Ceramic Tile Co. • Winburn Tile Mfg. Co.

continued from p. 37

MORTGAGE MARKET:

Tightest pinch in years grips housing but experts see hope of easing in Aug.

At the banquet of the Pacific Northwest Home Builders convention last month in Spokane, the orchestra played "I Can't Give You Anything but Love, Baby," and the crack went around the speakers' table that this should be the theme song of mortgage lenders.

Mortgage money, which tightened abruptly in April after showing signs of easing, is now tighter than it has been in years.

With savings off and general business demand for loans at astronomical heights, interest rates have climbed to their highest level since the depression. FHA and VA mortgage loans, with their interest frozen politically at 4½%, require sharply increasing discounts to compete in the traditionally money-shy regions. When discounts rise rapidly, it gets difficult to hide them in the price of the house. Profits shrivel. Builders cut back production.

Talk by both builders and lenders is more bearish than HOUSE & HOME'S editors have heard in a long time. Former MBA President William A. Clarke of Philadelphia, whose forecasting average is better than most, was predicting a "substantial reduction" in 1956 housing volume. "The mortgage market is in chaotic condition," commented Executive Vice Pres. Maurice A. Pollak of Chicago's Draper & Kramer. President Tom Coogan of Housing Securities Inc. was predicting "crisis in the housing industry."

Construction loans are tougher and tougher to get in many cities. So are warehousing loans.

Interest on both is up ¼% to ½%. The Federal Reserve's deliberate tightness of money is pinching commercial banks hardest. "Our bank is flat broke," said an officer of a leading New York bank. To raise money to meet lending commitments, the "busted" banks were selling government bonds (usually at a loss) or borrowing from the Fed (at discouragingly high prices).

Despite its severity, the mortgage drought may be short-lived. Reasons:

1. Starts are dropping as sales weaken in many cities. Lenders generally blame several years of "overproduction" and give-away credit terms for temporary gluts of unsold homes. Most builders point at something else—building "too expensive" models, "unrealistic" FHA and VA requirements which "force" them out of low-price brackets, for example.

2. Many of the forces in the US economy that combined to convince the Federal Reserve that inflation threatened this spring are already reading a crest. If the peak squeeze on money passes this month, as some expect, the money market may begin to ease by August. Items:

- Corporations have been borrowing heavily to meet June tax payments.
- Spring's whopping bulge in capital expenditures for new plant construction has reached a point where most borrowings are arranged.
- Businessmen have been piling up inventories in anticipation of price increases (especially in steel, where a strike threatens). But this trend is beginning to reverse itself—reverse so sharply, in fact, that some economists now talk of a possible "inventory recession."

With the Federal Reserve's latest boost in rediscount rates under criticism even inside the administration, some prophets look for moves to ease money after the June squeeze. Some experts think the Fed's credit control mechanism, developed in the '20s and '30s, is now obsolete for steering an economy that has undergone revolutionary changes.

If mortgage money and construction loans ease by September or so, it will be too late to affect 1956 total housing output much. But builders who time their operations accordingly should be better off than those who don't.

MORTGAGE BRIEFS

Conventional lending gains

Conventional lending accounted for 57% of housing starts in the first quarter of this year, compared to 50% in the first quarter of 1955.

Union fund to buy VAs, FHAs

Evidence grows that pension funds are beginning to come into the mortgage market more heavily. The International Ladies Garment Workers Union will put $15 million of its $167 million in health and retirement reserves into FHA and VA mortgages on small homes. President David Dubinsky says the union expects to buy 1,500 mortgages in the $10,000 to $12,500 bracket.

Nudge for pension funds

Chairman Albert Rains (D, Ala.) of the House housing subcommittee will hold a round-table hearing on channeling pension funds into mortgages.

He hopes to hold the discussions soon after the banking committee completes hearings on the 1956 housing bill. Custodians of labor-management funds have expressed interest in the idea, he says.

"Some action to tap new sources of financing funds is certainly necessary," Rains contends, "because as it is now, building money tends to dry up as soon as we hit a pace of more than 1.2 million housing units a year."

Move to scrap VHMCP blocked

Added concessions by HHFA have persuaded the House veterans affairs committee to pigeonhole its bill to kill the Voluntary Home Mortgage Credit Program by prohibiting VA from referring direct loan applications to it. HHFA agreed: 1) to stop referring applicants to VHMCP in areas where VHMCP has been slow finding private mortgage money, 2) to stop referring cases to VHMCP where a builder refuses to absorb the cost of a discount.

Will cost of borrowing by S&Ls increase?

Cost of borrowing from the Home Loan Bank by the nation's federal savings and loan associations seems bound to rise.

The Home Loan Bank Board sold $126 million of six-month consolidated notes at mid-month with an all time high interest rate: 3½%. Ten of its 11 member banks were charging from 3 to 3½% for loans to member institutions (the San Francisco HLB has just upped its rate from 3½ to 3¾%.)

S&L industry spokesmen are resigned to paying 4% for loans from regional HLBs before long—even though only $51 million from the note sale will be used to make new loans to members. Interest on HLBB consolidated notes has zoomed steadily since March 1955, when it was only 1.8%.

The US Savings & Loan League has just issued a forecast that conventional loan in-

terest rates are unlikely to rise in the next six months. But the rising cost of money paid by S&Ls themselves may knock it awry.

Moves by the Home Loan Bank Board to increase what S&Ls may borrow from the system will amount to no more than a drop in the empty mortgage bucket. Experts doubt it will result in more than $10 million of additional advances. The move was widely misinterpreted as indicating the HLB was pulling in the other direction from the Federal Reserve.

The new order lets member S&Ls borrow up to 10% of their total share accounts. Since last December, the HLB has had a more restrictive—and complex rule. It would let S&Ls who had borrowed some money already get new advances only up to 5% of their share accounts and S&Ls who had not tapped the mother-system for loans could only get a 5% total.

Discounts up ¼ point, FHA survey finds

Discounts on FHA mortgages rose about ¼ point between April 1 and May 1, the agency says.

Average secondary market price for Sec. 203 loans for immediate delivery fell from 98.6 in April to 98.3 in May. Nationwide range was from 96 in the West to par in parts of the East.

FHA has been reporting discounts monthly since Feb. The data is based on opinions of FHA district directors, not actual deals. The latest figures:

OFFERING PRICES, FHA 203s
Immediate delivery

Zone	May 1, 1956 Average	Range	April 1, 1956 Average
Northeast	99.8	99.0-100.0	99.8
Middle Atlantic	99.1	98.0-100.0	99.2
Southeast	98.2	97.0- 99.0	98.4
North Central	97.9	96.0- 99.0	98.5
Southwest	98.0	97.0- 98.5	98.3
West	98.4	96.0- 99.0	98.6
United States	98.3	96.0-100.00	98.6

S&L leader pushing plan to tap new money sources

A plan to draw new sources of money into home finance has been proposed by former (1952) President Ben Hazen of the US Savings & Loan League.

Hazen, who considers VA and FHA financing "socialistic and bureaucratic," wants 600 cooperating S&Ls to set up a Home Loan Fund to sell certificates to investors in multiples of $5,000 and put the money into S&L's across the nation.


HAZEN

Investors would get the same dividend as any shareholder of a savings and loan association—(average: 3%)—less 0.1% servicing charge. Certificates would be redeemable at par at any time.

Hazen, president of Benj. Franklin S&L of Portland, Ore., hopes many segments of the shelter industry including manufacturers of building materials and appliances—will invest in the fund. He especially hopes to see pension funds invested.

Money to the mortgage

Three trustees would direct investment of the fund, routing money to where it is needed most. In Hazen's words: "The money would be taken from the market to the mortgage instead of bringing the mortgage to the market."

At work on his plan since early 1955, Hazen has already started lining up members for Home Loan Associates, the promotional arm of the operation. He plans to start Associates when he has 600 SL's willing to join. Last month he had 477 pledges.

To participate, each member S&L would pay an annual fee of no less $25 nor more than $300, based on assets. Each would also pay to Associates 0.5% of all investments received through the Home Loan Fund. This money would go to promote the plan more.

SEC approval a hurdle

Hazen expects to have his 600 members for Home Loan Associates this summer. Home Loan Fund will go slower since it will have to be examined thoroughly by the Securities and Exchange Commission before it can begin operation.

"The whole idea," Hazen explained, "is to make more money available for the home mortgage market via private enterprise. Static areas and big investors with money to spare can thus put their money to work in money-short areas."

If his plan clicks, Hazen thinks it will mean more conventional loans by local S&L's and fewer FHAs, VAs sold to far off investors.

S&Ls map fight against HLBB separation plan

The US Savings & Loan League has began mustering support to fight an administration move to separate the Federal Savings & Loan Insurance Corp. from the Home Loan Bank Board.

President Eisenhower wants to divorce the insurance agency from HLB through use of his reorganization powers. His action was a variant of recommendations by the Hoover Commission. It also had support from a report by the General Accounting Office that it was undesirable for the two agencies to have identical membership since their duties were "inherently conflicting."

US S&L spokesmen charged that the move would only result in more red tape for S&Ls plus lack of uniformity.

The president's action can be prevented only if a constitutional majority of either House or Senate vote against it. If neither House even considers it, it becomes effective automatically in 60 days.

NEWS continued on p. 44

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee, who retains servicing.)
As reported to HOUSE & HOME *the week ending May 12.*

FHA 4½s (Sec. 203) (b)

City	Minimum down*- 30 year Immediate	Future	Minimum down*- 25 year Immediate	Future	25 year, 10% down Immediate	Future
Boston local	a	a	a	a	a	a
Out-of-state	96-97b	96-97b	96½-97½b	a	a	a
Chicago	a	a	97	97	97-98	97-98
Denver	a	a	97½-98½	97½-98½	98½-99	98½-99
Detroit	96-97½	97	97½-98½	97½	98-99	98
Houston	97½-98	a	97½-98	a	98½-99½	98½-99½
Jacksonville	97-97½	97	a	97	98	98
New York	99-par	99-par	99-par	99-par	99-par	99-par
Philadelphia	98c	98c	98c	98c	98c	98c
San Francisco	a	a	a	a	99	98
Wash., D.C.	98½	98	99	98½	99	98½

** 7% down on first $9,000*

SOURCES: Boston, Robert M. Morgan, vice pres., Boston Five Cents Savings Bank; Chicago, Maurice A. Pollak, exec. vice pres. Draper & Kramer, Inc.; Denver, C. A. Bacon, vice pres., Mortgage Investments Co.; Detroit, Stanley M. Earp, pres., Citizens Mortgage Corp.; Houston, Everett Mattson, vice pres., T. J. Bettes Co.; Jacksonville, John D. Yates, vice pres., Stockton, Whatley, Davin & Co.; New York, Gabriel Schwartz, vice pres., J. Halperin & Co., Philadelphia, W. A. Clarke, pres., W. A. Clarke Mortgage Co.; San Francisco, Raymond H. Lapin, pres., Bankers Mortgage Co. of California; Washington, D. C., Hector Hollister, vice pres., Frederick W. Berens, Inc.

VA 4½s

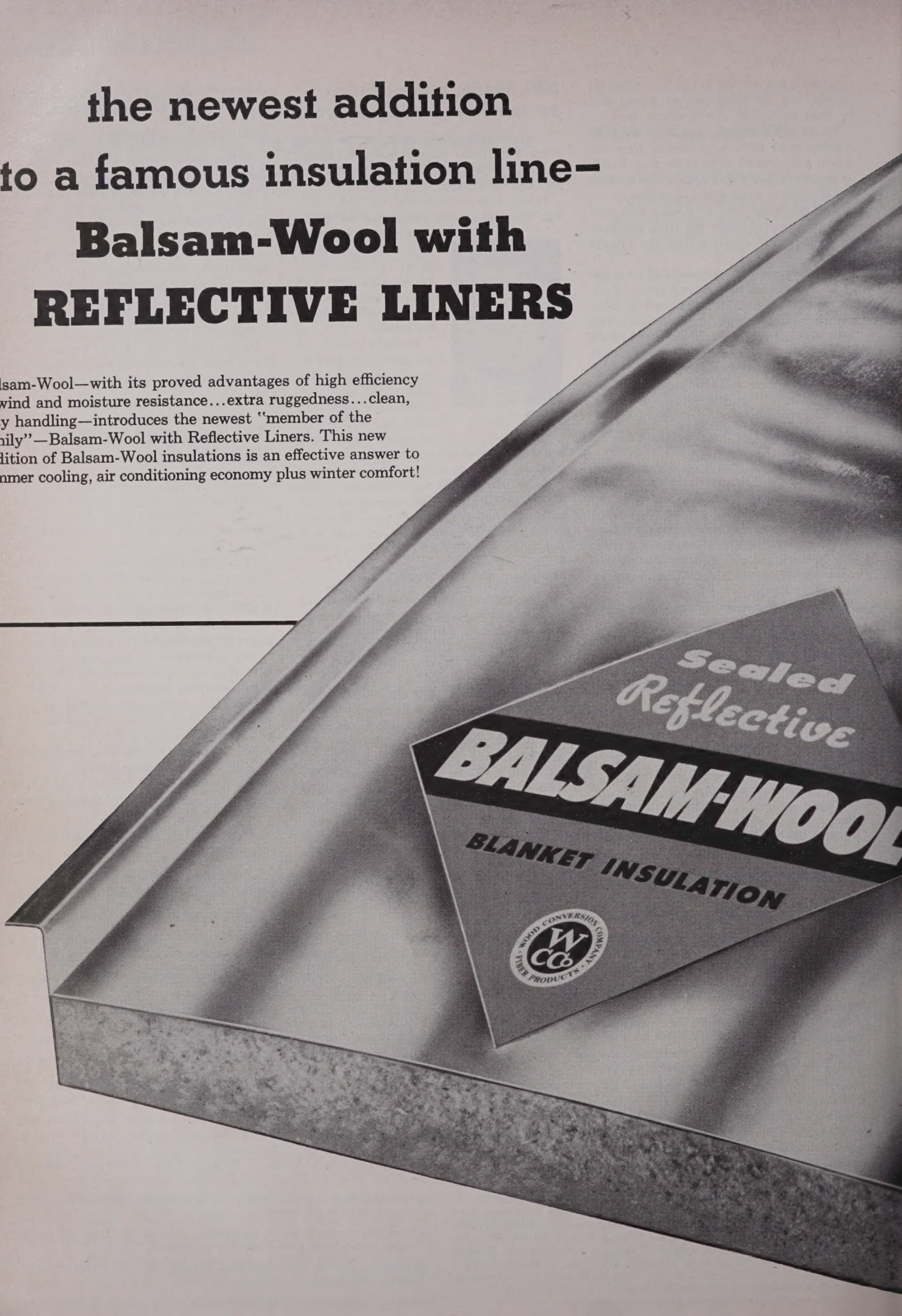
City	30 year, no to 2% down Immediate	Future	25 year, 2% down Immediate	Future	25 yr. 5% down or more Immediate	Future
Boston local	par-101	par-101	par-101	par-101	par-101	a
Out-of-state	95-97b	a	96-97b	96-97b	a	a
Chicago	a	a	96-97	96-97	97-98	97-98
Denver	97½-98½	97-98	97½-98½	97-98	97½-99	97-99
Detroit	94½-95½	95	95½-96½	96	97-98	97½
Houston	96½-97b	95½-96b	97-97½	97-97½	97½-98	97½-98
Jacksonville	95½-96½	95½-96b	95½-96½	95-96b	97	96-96½
New York	99-par	99-par	99-par	99-par	99-par	99-par
Philadelphia	97½bc	97½bc	97½bc	97½bc	97½bc	97½bc
San Francisco	95-95½	94½-95½	95½-96½	a	97-98	96½-97½
Wash., D.C.	96½	96	96½	96	97-98	97½

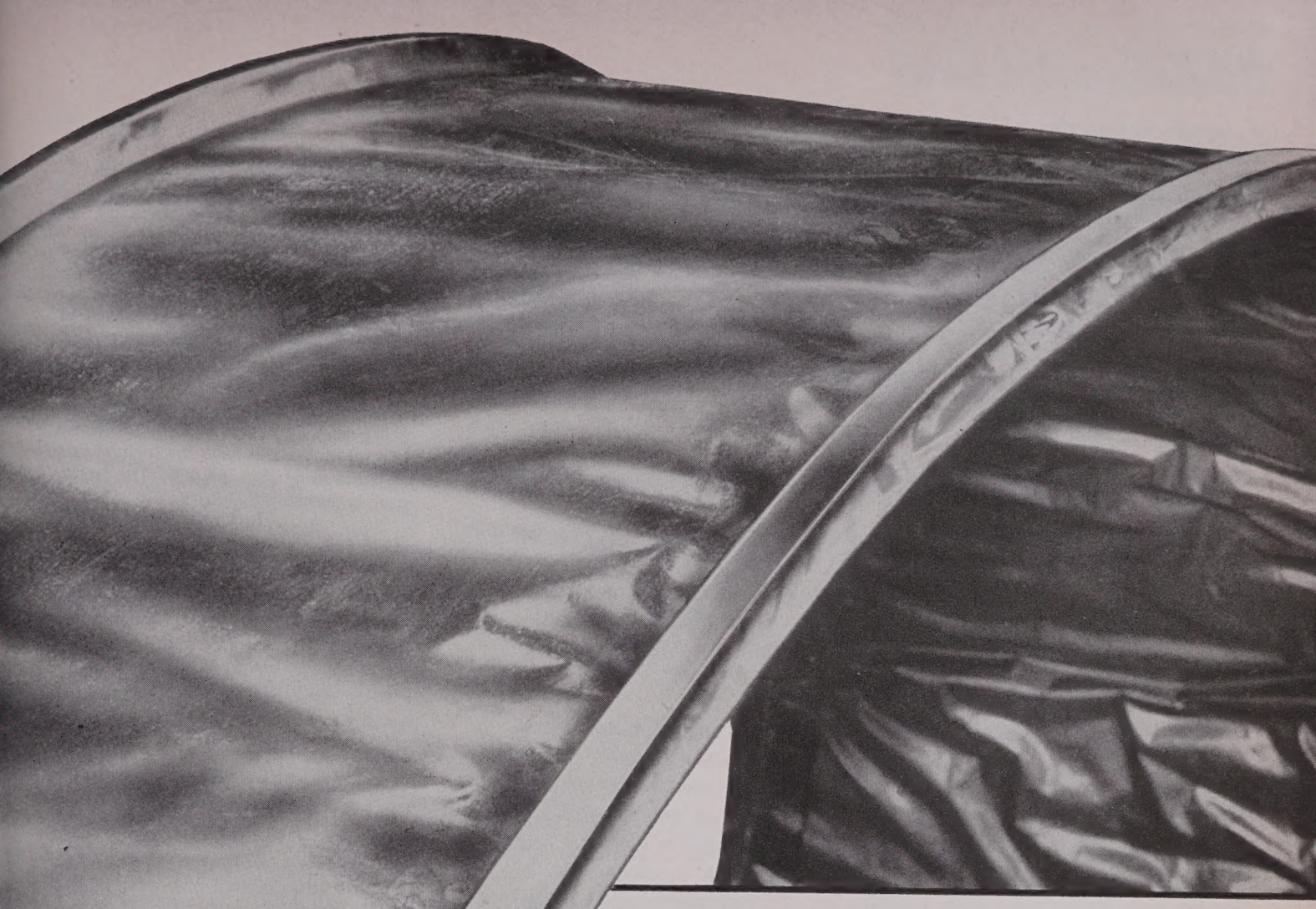
- Immediate covers loans for delivery up to 3 months; future covers loans for delivery in 3 to 12 months.
- Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small towns or rural zones.
- Quotations refer to houses of typical average local quality with respect to design, location and construction.

NOTES: a—no activity. b—very limited market at this price. c—price to builder.

the newest addition to a famous insulation line– Balsam-Wool with REFLECTIVE LINERS

Balsam-Wool—with its proved advantages of high efficiency ...wind and moisture resistance...extra ruggedness...clean, easy handling—introduces the newest "member of the family"—Balsam-Wool with Reflective Liners. This new addition of Balsam-Wool insulations is an effective answer to summer cooling, air conditioning economy plus winter comfort!





Especially developed for air conditioning economy—summer comfort—with the exclusive Spacer Flange!

This newest Balsam-Wool blanket insulation combines reflective liners with an "old" Balsam-Wool exclusive advantage—the Spacer Flange that positions the blanket to provide important air spaces on either side of the insulation. These flanges make correct application easy, assuring air spaces which are essential for proper performance of reflective surfaces.

Again—a SEALED blanket insulation!

Balsam-Wool's insulating blanket is enclosed (as are all Balsam-Wool insulations) for extra protection. The flanged liner of aluminum foil provides a vapor barrier as an integral part of the new blanket. The other reflective liner offers the extra benefit of a rugged wind and heat barrier. Here is 3-way protection...reduces heat transmission by conduction, convection and radiation. For full details, write Wood Conversion Co., Dept. 236-66, First National Bank Bldg., St. Paul 1, Minn.

WOOD CONVERSION COMPANY · WCCo · FIBER PRODUCTS ·

SOLD BY LUMBER DEALERS ONLY

BALSAM-WOOL®

Sealed Blanket Insulation

continued from p. 41

HOUSING MARKET:

Sales slump in many cities; starts fall so low 1.2 million year looks unlikely

Housing starts have fallen far enough below last year's levels to make more than 1.2 million starts this year unlikely.

In the first four months of 1956, the nation's home builders began only 349,900 units (graph, below). That is 16% less than during the same period last year (but 11,200 units higher than the first third of 1954).

To reach 1.2 million starts, housing would have to average more than 106,000 starts a month the rest of the year.

Not only tight mortgage money, but also slumping sales of new homes cast doubt on chances for any such achievement. But it is noteworthy that dollar volume of new housing should slump only a little, if at all, because builders are putting up bigger, more expensive houses (see col. 3). That means the housing industry's shakeout—if it is that—may hurt more statistically than financially.

Overhangs of unsold homes are a worry in some cities.

Dallas and Houston are working their way out of overhangs of unsold houses, but many another Texas city is having sales trouble. In San Antonio, one big builder has left some 30 slabs in the ground for two months—long enough to rust pipes—rather than risk pouring $7,000 or $8,000 of good money after $3,000 of bad. That is an extreme case. But sales are flat in Corpus Christi and elsewhere—though brisk in El Paso because of missile development.

On the West Coast, parts of the Los Angeles area (notably Orange County), are having trouble. Sales are better in northern California, but the spring pickup still is not encouraging. Houses are still selling well in Detroit, Chicago and Cleveland—among other places—but the market looks weak to some experts in Washington, D. C., Memphis, Oklahoma City and much of Florida.

The general picture: cities which have had a housing boom for the last two or three years are undergoing a sales slump. Where housing has stayed on an even keel—and in many a little town—new homes are still selling.

Some sophisticated builders and mortgage men say it was just as well money is as tight as it is. Said a Florida mortgage banker: "We've got some suffering to do and we better get started."

MARKET BRIEFS

Home ownership hits 60%

US home ownership has reached a record 60%, the Census Bureau reported. This compares with 55% in April 1950, the last previous census of housing. Among nonfarm households, ownership is only 59%, compared to 53% in 1950.

The South showed the biggest gain, going from 53.7% to 60.7%. The North Central states still have the highest rate of home ownership, 66.4%. The Northeast is lowest with 52.1%.

Houses grow bigger

Said FHA in an official announcement: "American families want and are getting larger homes."

Last year, for the first time since FHA has kept records on it, the typical FHA-insured new house had more than 1,000 sq. ft. Average size FHA new house, by years:

1955 ...	1,022 sq. ft.	1952 ...	923 sq. ft.
1954 ...	961 sq. ft.	1951 ...	879 sq. ft.
1953 ...	924 sq. ft.	1950 ...	838 sq. ft.

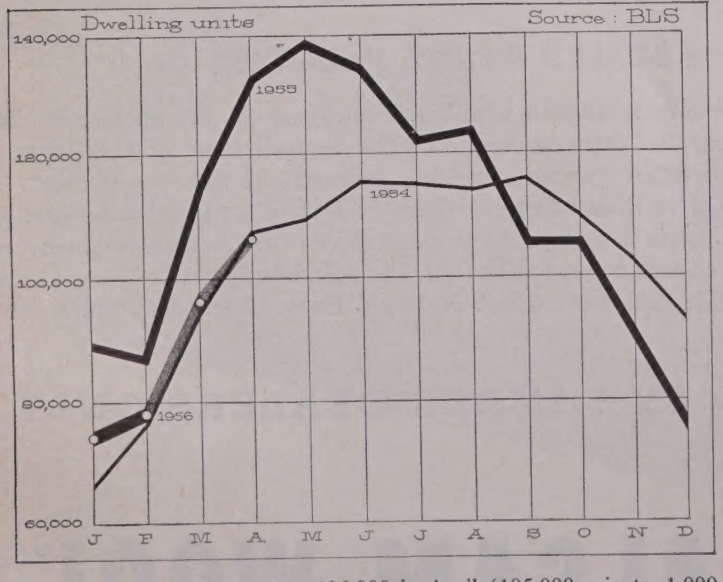
The typical 1955 FHA new house had 5½ rooms, including three bedrooms. It was valued at $11,750, had a mortgage just over $10,000, with monthly payments of $74.

VA sketches average buyer

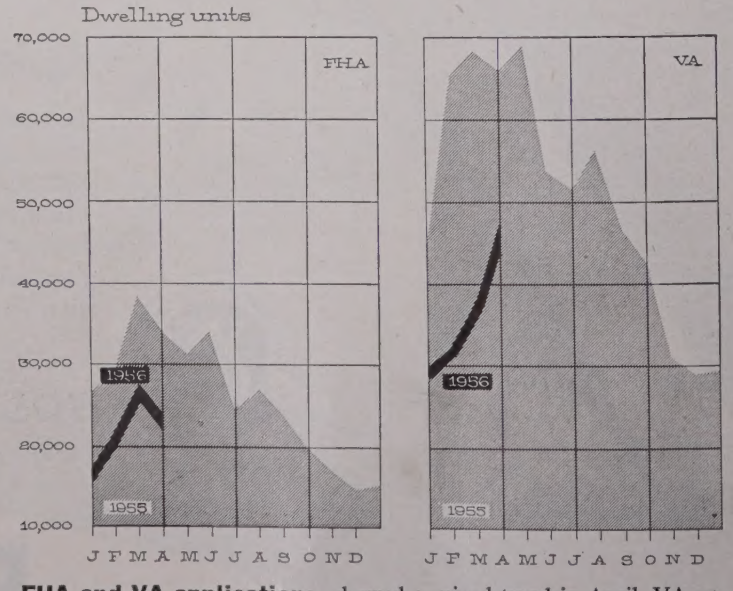
VA surveyed 20,000 of the more than 1 million GI home loans guaranteed in 1954 and 1955, came up with this picture of the average buyer and his house:

Income	$5,925	Age	32
Sale price ..	$11,800	Down pay ..	$950
Monthly payments			$96.75

Two of every five buyers made no down payments, and 44% applied for mortgages with 26 to 30-year maturities, VA reported.



Housing starts climbed to 106,000 in April (105,000 private, 1,000 public). BLS' new computation of the seasonally adjusted annual rate translates this into a year's output of only 1,110,000 houses. More significant is the fact that starts for the first four months of the year total 349,000—well below 1955's 418,500 for the same period, but ahead of both 1953 and 1954.



FHA and VA applications showed a mixed trend in April. VA appraisal requests rose sharply to 45,769 (from only 37,511 in March). FHA applications slumped unseasonally to 23,755 (22,276 homes, 1,479 projects). The figures suggest more and more builders are pushing to get in on the VA market before it expires, while FHA terms grow more and more unattractive.

VA valuations protested

Builders in the Pacific Northwest have had so much trouble with low valuations from both VA and FHA that more and more of them seem to be turning to conventional financing.

At the second annual Pacific Northwest Home Builders convention in Spokane, 350 conferees talked of making an organized objection to appraisal formulas and methods, but finally decided to take no concerted action.

In Spokane, home builders and VA have been arguing since January since one builder, up to his shingles in frustration at low VA appraisals, appealed directly to Sen. Warren G. Magnuson (D. Wash.) for help in getting higher apprasials out of the regional VA office.

Spokane builders complain they can barely make 3% profit on a VA house. Said one builder: "Anyone still building under VA just doesn't realize he is going broke." Builders say FHA appraisals generally run 10% higher than VA on the same house.

Hansel & Gretel fad

The "Hansel and Gretel" house (Bavarian-type cottage with low-flying shake roof, gingerbread and imitation leaded glass windows, which is still selling well in Los Angeles, was tried out in Spokane. One builder put up a number of them, had pretty good sales. But the fad ended quickly. Now, Spokane builders say the style is a drug on the market. Los Angeles builders wonder if this foreshadows public taste in their area.

A newer fad, just emerging in such spots as Connecticut, Kansas City and the San Francisco region: new houses built like remodeled barns.

Unsold homes up in Portland

Cost of building new homes in Portland, Ore. has increased approximately 3.2% in six months, mainly because of increased labor costs. But the selling price of existing homes has remained unchanged at close to the level of two years ago.

These figures are from the latest semi-annual market study, Portland *Real Estate Trends,* published by the nonprofit metropolitan Portland real estate research committee.

Vacancies in the four-county metropolitan area during the six months since the previous report Sept. 30 have dropped from 1.40 to 1.31%. But the study shows the vacancy rate in medium-priced homes ($7,500 to $9,999) rose from 0.76% six months ago to 1.34%. In both lower and higher-priced homes, vacancies declined.

The inventory of unsold homes past plastering stage rose, too. March 31 a year ago there were 374. Last September there were 500; March 31 this year 582. But a sharp pickup since the March 31 closing date for survey statistics has greatly reduced the inventory, say builders. In another report, bringing figures into April, VA indicated the inventory has dropped to "near normal."

The typical house that cost $12,355 to build last Sept. 30 cost $12,751 at the end of March. It would have been a $5,000 house in 1941.

Walter Daran



SCHOLZ PREFABS WERE AMONG FOUR COMPLETE HOMES IN NEW YORK SHOW

Union display of make-work tactics overshadows first New York home show

Even before the nation's biggest spring home show opened in New York's mammoth Coliseum, the building industry and the public were given a muscular display of union make-work tactics.

Items:

- Teamsters paraded around the building, stopping deliveries and insisting that they haul and deliver every item to be part of an exhibit, however small.
- Carpenters and stagehands had a jurisdictional dispute over who was to set up exhibits. It grew so involved that the stagehands were following the carpenters around, taking down things which had just been put up.
- Glaziers threatened to picket (but didn't) because prefab house exhibits came with windows already in place.

Show sponsors blamed the labor trouble on newness of the $35 million structure, which had opened just two weeks earlier. It was built—along with an adjacent 20-story office building—with controversial Title I slum clearance aid.

Cost of exhibiting in the show spiralled overnight. Prefabber Don Scholz, who called the unionists "goons and gangsters," expected to pay $10,000 to set up his exhibit of two prefab homes. Final cost: $30,000. Halfway through the show's nine-day mid-May run, Scholz tried to pull out, complaining that the homes had been erected poorly by Coliseum workmen. He couldn't get out. Show officials would not let workmen take down the models.

Many another exhibitor was digusted. Complained one, pointing to his exhibit sign fastened with Scotch tape: "A ratty looking exhibit, but if I try to put hooks on it, some union will come screaming at me." Another exhibitor complained that the union had scouts who did nothing but make sure no one did anything on an exhibit but Coliseum union employes. Several exhibitors tried to use their own union men, but this wasn't allowed. Predicted one: "If this keeps up this place will be a warehouse in six months."

Wages charged by the Coliseum workmen stunned exhibitors. Electricians were paid $10 an hour to do no more than plug in and unplug power tools. Carpenters got $11 an hour. Cost for a cleaner to sweep out a prefab, a one-hour a day job, was $30.

New York newspapers frowned editorially on the unions. Commented Scripps-Howard's *World-Telegram & Sun:* The unions responsible for this mess don't seem to realize that labor has an enormous stake in the success of the Coliseum. If labor wants to kill the goose capable of springing the golden eggs, it's going about it just right with its senseless shenanigans."

At one point 42 exhibitors announced they

NEWS continued on p. 49

Walter Daran



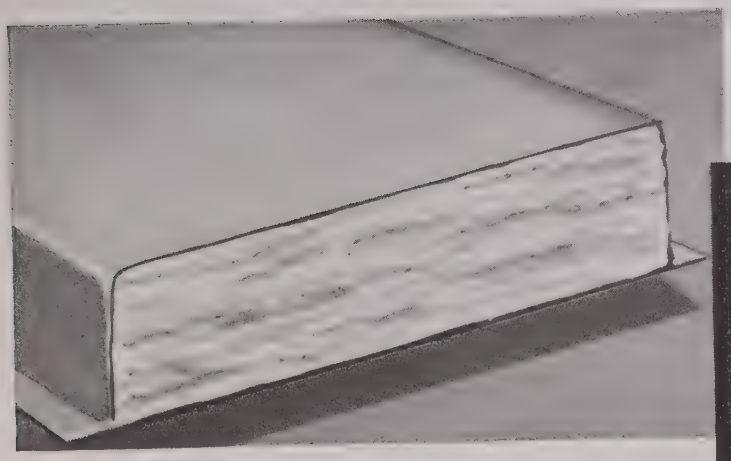
A SALES PITCH FOR VIBRATOR CHAIR

Wm. R. Frutchey



THE COLISEUM: SOON A WAREHOUSE?

Better Insulation Protection
Extra Sales-Features
with C

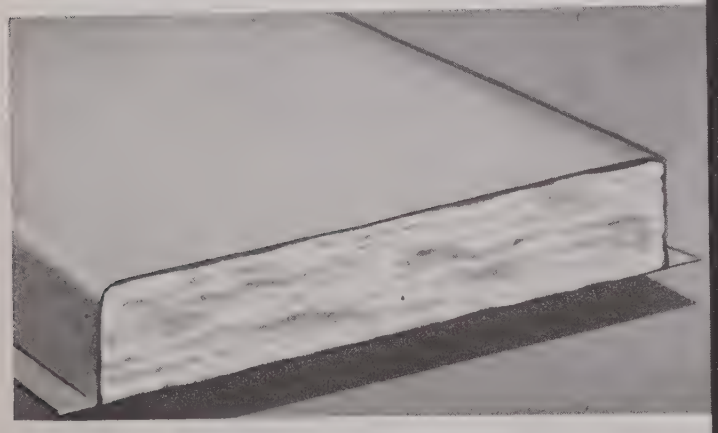


CELOTEX FULL-THICK REGULAR BLANKETS

A superior sidewall insulation. The blankets practically fill the stud space, providing the maximum of year-'round comfort and fuel economy.

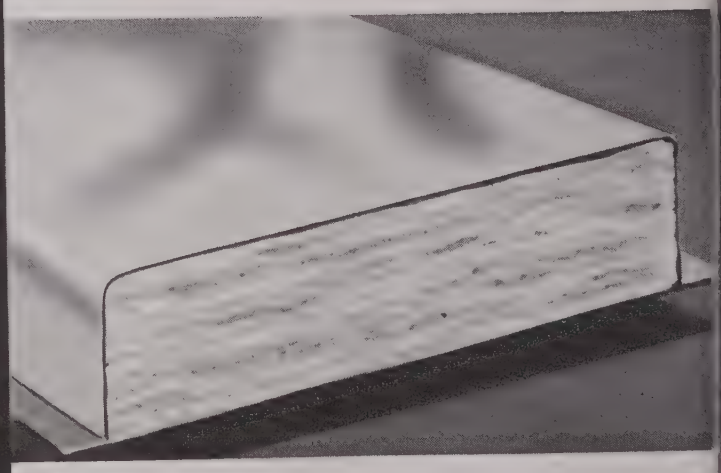


ROCK



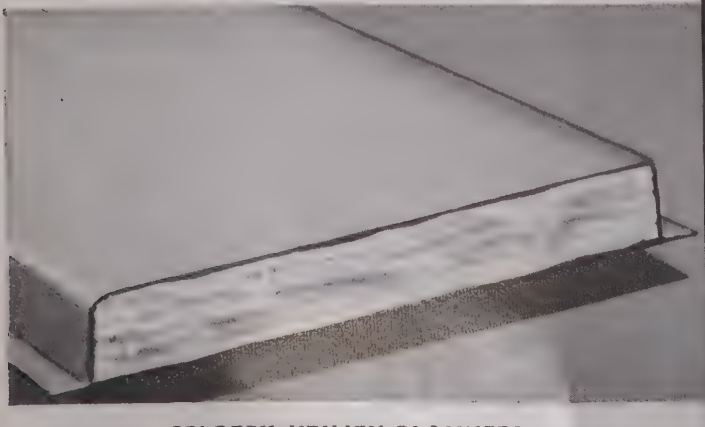
CELOTEX MEDIUM-THICK REGULAR BLANKETS

Cost little more than ordinary thin blankets of less insulation value . . . *require no more labor cost* to install. Offer an excellent balance between cost and insulation value for most homes.



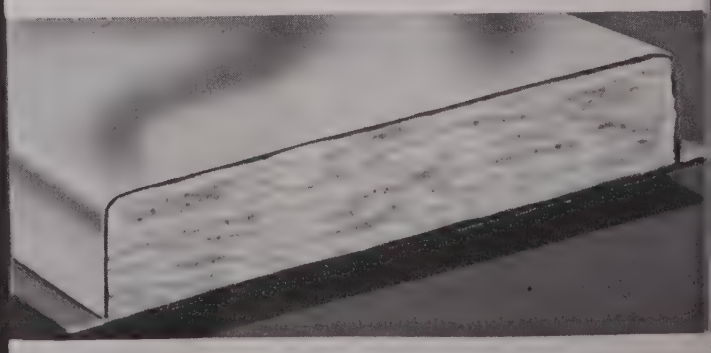
CELOTEX FULL-THICK REFLECTIVE BLANKETS

Two insulating materials in one product: Reflective-surfaced sheet plus a blanket of spun rock wool. Specially developed for insulation of top-floor ceilings in air-conditioned homes. An outstanding insulation product, retarding the flow of both radiant heat and conducted heat for year-'round comfort.



CELOTEX UTILITY BLANKETS

An economical insulation that has 50% more insulation value than ordinary 1" blankets, yet is comparable in cost. Greatest possible insulation value for the money.



CELOTEX MEDIUM-THICK REFLECTIVE BLANKETS

2-in-1 blankets, insulating against both radiant and conducted heat, designed particularly for sidewalls in air conditioned homes. A necessary inner wall air space is provided for added insulating efficiency.

continued from p. 45

would quit the show if the unions didn't stop their make-work tactics. Eventually several did walk out. (The sponsors said there were only two. Other exhibitors said there were a dozen.)

Near the show's end, carpenters and stagehands, brought together by top union leaders who deplored the "black eye for labor," reached agreement on their dispute.

The home show itself was no great shakes as a show. With 300,000 sq. ft. of space on four floors, the sponsors took many a non-housing exhibitor, including pitchmen for everything from vibrator chairs to summer coats and carnival china.

Though the automobile industry is housing's toughest competitor for the consumer dollar, four cars were exhibited. As usual appliance makers had some of the best displays but there was little in the show that hadn't been shown elsewhere before.

The show was sponsored by a group of Long Island and upstate home builders and architects, headed by builder Walter G. Stackler of Roslyn, L. I. They formed a private corporation to run the show with Robert A. Durk as director.

Show attendance topped by a small margin the predicted 500,000. Sponsors called it a success from both an industry and financial viewpoint.

McAllister predicts starts between 1.1 and 1.2 million

Chairman Walter W. McAllister of the Federal Home Loan Bank Board thinks housing starts "may range between 1.1 and 1.2 million units this year." He told the annual conference of the Natl. Assn. of Mutual Savings Banks: "If we tried to sustain in excess of 1.2 million units per year, with the balance of the economy continuing at its present level of production, we simply wouldn't be able to do it. We wouldn't have available the labor or materials, and we certainly wouldn't have the funds."

VA, BUILDERS ON THE GRIDDLE

Underestimating tax on VA homes brings grand jury probe

Southern California builders move fast to stamp out careless arithmetic giving them black eye

A grand jury in Orange County, Calif. has just flung another brickbat at the Veterans Administration's home loan program.

The jury rapped VA for failing to protect the interest of veteran home buyers by "allowing deception in tax and impound schedules."

Although it is a local report covering a local southern California situation, the jurors' findings and the story behind them are coming in for close scrutiny elsewhere—especially by Congressional opponents of the VA home program who argue it has operated for the benefit of builders, not buyers.

And Los Angeles home builder groups, outraged at the black eye home building is getting from the disclosures, have taken strong steps to slam the door on under statements of taxes by both members and non-members.

Only one price group

The squabble revolves around 6,000 new homes in the $11,000 to $13,000 price bracket, sold in the last two years in the hotly competitive Orange County market. Some underestimated taxes as much as 75% but buyers didn't know it. This had the effect of making families with lower incomes qualify as buyers. In one tract, for instance, builders estimated taxes at $60 per year. They turned out to be about $250.

Home owners found out early this year when mortgage holders notified them that their monthly payments were being increased $10 to $15.

Their cries of outrage were heard first by the editors of the semiweekly West Orange County *News* and Garden Grove *News*. "The main reason we got into it," says News Editor Jim Cooper, "was the moral issue of whether any builders were using phony impound statements to qualify marginal buyers."

Some affected builders protested that increased tax rates, unforeseen when taxes were estimated, caused payments to jump. Buena Park, for instance, boosted taxes 40% to $1.25 per $100 assessed valuation. This meant an increase of about $4 a month on a $12,000 house, since California assessments run about 25 to 30% of market value.

That did not explain away increased payments of $18 a month. However, as the Garden Grove paper noted: "Most 'estimates' of probable tax payments are made by lending institutions rather than by builders or sales representatives in the tracts. However, as they admit, some builders may have been a little lax in double checking the 'estimates.' Regardless of who was initially at fault, the builders are getting the blame and they know it."

Mass meetings

Home buyers began holding mass meetings, and, talking over their problems, brought up examples of what they said was shoddy construction.

Builders replied that many gripes were just lack of maintenance by owners, and that they were actually taking care of many complaints which were unwarranted—though not, perhaps, as promptly as possible.

When News Editor Cooper and City Editor Gale Ellis made a page one crusade out of the complaints, the NAHB-affiliate Building Contractors' Assn. and Home Builders' Institute moved into the picture.

Warned BCA President Ernani Bernardi:

"Although these organized protests are localized in Orange County, studies by a committee comprised of mortgage lenders, the VA and representatives of the BCA and HBI indicate that this practice of underestimating taxes and of laxity in taking care of call backs exists in most areas where GI houses are sold, the difference in degree depending on the amount of competition for sales in the particular areas.

"Unless drastic measures are taken to correct this situation these mass meetings could spread to all areas with damaging results to the GI housing program."

BCA and the Home Builders Institute urged all builders to obtain statements from the tax assessor in the county where they are building giving the closest possible estimate of taxes. BCA printed forms on which taxes can be listed and given to buyers. Said BCA's Bernardi: "We do not intend to sit idly by while a few unscrupulous operators give the industry a bad name. These men are only in the GI program to make a fast buck."

These measures didn't stop the Orange County grand jury—now pressured by veterans' groups—from going ahead with its probe. Although the jury's report issued April 26 blistered VA for "allowing deception in tax and impound schedules," it noted that VA officials testified that new procedures —those proposed by BCA—would prevent such trouble in the future.

Arnold Wilken, VA loan guaranty officer for southern California, said later however, that it is not VA's job to check the conditions of payment on the GI loans it insures.

"The VA never actually sees the loan papers, only the applications for a loan. It is the veteran's place to make certain of his own obligations," Wilken added.

VA has moved in to force builders to make necessary corrections on homes still covered by a warranty and—in view of the publicity—nearly all builders are cooperating without complaint.

Summing up

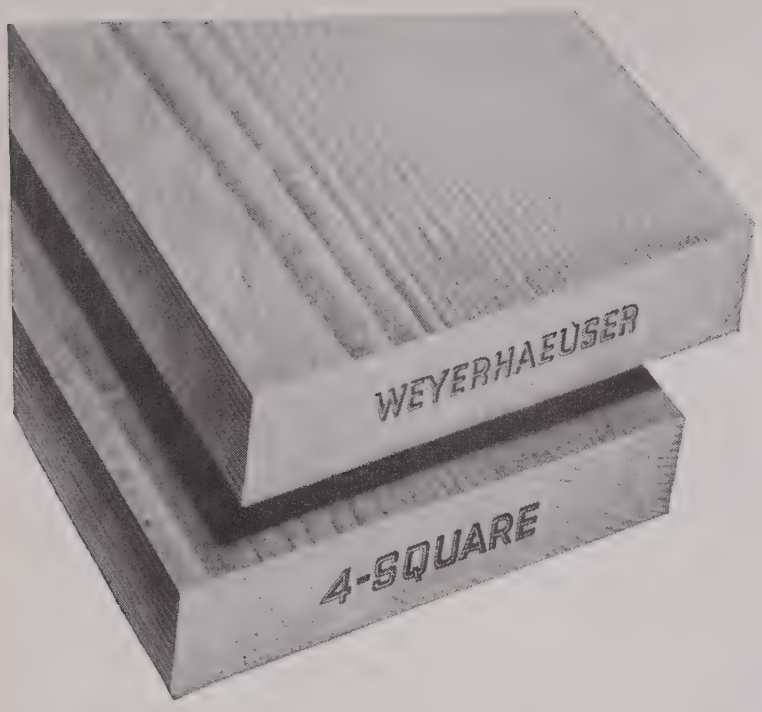
Builders who tried to maintain an objective attitude toward the entire matter feel that the construction was never shoddy as charged. They contend that it was more a matter of corner cutting by builders anxious to keep prices down so people could afford to buy.

The County *News* checked 80 complaints about poor construction, concluded that 60 were justified, 18 were just normal household wear and six were unjustified.

City Editor Ellis is quite pleased with the results of his crusade—a fight never reported by Los Angeles metropolitan dailes. "We feel we made our greatest strides in getting the industry to clean up its own house," he explains. "Everyone learned a good lesson from this. The subdividers will keep in better contact with their buyers after they've finished a tract and moved out."

Financially, the County News and Garden Grove News may have had a lesson, too. The two papers had only recently started real estate pages with the hope of getting some lucrative home advertising. It vanished with the crusade.

NEWS continued on p. 55



This brand name also means...

Kiln-dried Lumber

Seasoned lumber delivers sound building values— and gives builders an important sales point

● If your business is building and selling homes, here is a fact worth considering: a home is easier to sell if it is framed and sheathed with Weyerhaeuser 4-Square Kiln-dried Lumber.

There are several reasons for this increased salability.

For example, Kiln-dried Framing is an important sales feature because the public has learned that seasoned lumber is strong . . . that it has dimensional stability . . . that it contributes to sound, reliable construction.

Kiln-dried Lumber Sheathing on a new home is a feature that helps close many sales. Lumber is strong . . . it holds nails firmly. Also, lumber sheathing permits the use of shingles, vertical siding, and other special coverings without furring strips. These are a few of the reasons why lumber sheathing has been the accepted standard for generations . . . and is still a mark of high quality construction in homes, farm buildings and commercial structures.

The Weyerhaeuser 4-Square brand name, nationally advertised, is well-known to the public . . . a mark of quality that helps builders close sales.

All lumber bearing the brand name Weyerhaeuser 4-Square is scientifically kiln-dried, precision-manufactured, properly graded and carefully loaded for shipment. It is available in a wide range of species and grades, in commons and clears. There are Weyerhaeuser 4-Square Lumber products, from dimension to moldings, to meet every need in light construction.

Weyerhaeuser Sales Company

ST. PAUL 1, MINNESOTA

OPERATION HOME IMPROVEMENT '56 the year to FIX

continued from p. 49

LEGISLATIVE OUTLOOK:

Senate gets a housing bill that would balloon federal control of the industry

A 1956 housing law, looking only vaguely like the one proposed by the Eisenhower administration, is taking on more definite form.

As usual, the Senate banking committee was first with its proposal. It is one which makes industry leaders shudder, but one which they realize will be considerably toned down by the time Senate and House finally agree.

The administration took its worst—but not its most significant—drubbing on public housing.

The Senators voted for 135,000 units a year until the balance of the old 1949 Housing Act's authorization of 810,000 units is built. The President, on advice of his economic council, could fluctuate the program from 50,000 to 200,000 units a year. There are 494,000 units left in the '49 Act kitty, but PHA Commissioner Charles Slusser disclosed last month that appropriations limits on annual subsidies would let PHA build only 275,000 because prices have shot up. More important than the whopping boost from the administration's proposal of 35,000 units a year for two years was that the committee also ignored its plea to restore the requirement that a city must have a workable urban renewal program before it can get more public housing.

Most controversial point in the bill—and one which many industry leaders consider the worst—would have Fanny May expand its special support program by, in effect, buying some of the least desirable mortgages at the highest prices.

FNMA would be ordered to pay par for FHAs and VAs in territories, disaster areas, for military housing, housing for the elderly and—if possible—minority housing. It would create a new $50 million revolving fund for housing for the aged. But the limitation would be on commitments, not mortgage purchases, so it is really no limitation at all. Lenders predict if the FNMA section becomes law it will force Fanny May to run at a loss or make excessive demands on the Treasury. Other changes proposed for Fanny May were substantially those asked by HHFAdministrator Cole. There would be a floor of 1% and a ceiling of 3% on the stock participation requirement. Cole would control the figure.

An attack on package mortgages spearheaded by the National Retail Furniture Assn. may damage this important sales tool.

The committee considered (but did not adopt), an amendment to forbid inclusion of "rapidly wasting assets" (i.e. appliances) on mortgages. Instead, the senators asked FHA to study the probable effect of the ban and report back by next Jan. 31. Other key points in the Senate measure:

- *More liberal terms for garden apartments,* to match those of elevator apartments, are included in reworked FHA Secs. 220 and 221. FHA could allow $1,000 extra per room or per unit.
- *The military housing program would be increased* from 100,000 to 200,000 units with limit for average unit cost up from $13,500 to $14,250. The Pentagon hopes the higher limit would enable prefabbers to compete for Capehart military housing projects. The bill would also require FHA to consult Congress if FHA and the military disagree over how many housing units are needed at any base.
- *Housing for the aged would be expanded* by a new FHA section, providing for 40 year, 100% loans and down payments of $200. The bill would allow a third party to sign the note and post the $200. On top of regular public housing, the bill authorizes 15,000 units a year of public housing for the aged for five years. Eligibility requirements would be cut, too.
- *A National Housing Policy Committee is called for* to study housing needs and the capacity of the building industry and mortgage market—an idea hatched by public housers.
- *Title I home improvement program would be extended* for three years with the loan limit raised from $2,500 to $3,500 and the term from three to five years.

Flood insurance bill approved by Senate

A flood insurance bill, the result of severe floods in the northeast and far west last year, has been approved by the Senate.

Though the measure is much like the one proposed by the President, it has only nominal support of top HHFA men who admit privately they aren't pleased to see their agency get into the insurance business. They proposed and drafted the bill because, among other reasons, they feared Democrats might otherwise write a wilder one.

Key points in the Senate measure:

- A new federal Flood Insurance Administration would be set up under HHFA, directed by a federal insurance commissioner.
- The commissioner would set rates high enough to pay all claims over the long run. Policyholders would pay 60% of the premium with the government paying 40%. (After 1959, federal and state government's would share the 40% cost.)
- The bill limits to $3 billion the total face value of insurance which can be outstanding at one time, though the President can increase this to $5 billion.
- Losses would be limited to $250,000 for industrial policies and $10,000 per dwelling unit.

The Senate banking committee noted in its report favoring the bill that it hoped the government could show private insurance companies that flood insurance is financially feasible. Private companies now will not write flood insurance, contending the risk is too great.

Reni



TEAGUE AND BRADLEY

Is VA housing still a benefit?

NAHB asks merger of VA, FHA housing programs

Chances are increasing that the VA home loan program will get no more than a brief extension from Congress.

NAHB, in a major policy shift, has decided not to press for a three-year extension of GI home loans for World War 2 veterans.

Instead, the builders agreed at their directors' meeting last month in Washington, D. C. to back most ideas in a bill just introduced by Rep. Olin E. Teague (D, Tex.), powerful chairman of the House veterans' committee. Teague would start merging the VA home program into FHA by ending spe-

continued on p. 59

Finished homes in the Archer Company's Arbar Acres. There are 250 Archer built homes in Troy, Ohio.

"Flexivents® cut speed building schedule"

reports Ohio dealer-builder team

"Ease and speed of assembly and installation speeds our building schedule," says F. A. Archer (left), president of F. A. Archer Co., Troy, Ohio. "On the installation of over 1000 Flexivents we've had just one adjustment call. Flexivents have eliminated our complaint problem."

"Andersen's packaging of Flexivents makes it possible to store many units in a small area, and that's important to us," says J. W. Goodall, manager of Troy Lumber Company. "This same packaging also virtually eliminates damage by handling."



continued from p. 55

cial VA privileges for World War 2 veterans, but simultaneously reducing down payments under FHA's Sec. 203. Teague proposes down payments ranging from 2% on homes priced under $10,000 to 15% on houses priced over $24,000. The Teague formula:

Value of property Equal to, or more than	but Less than	Loan
	$10,000	98%
$10,000	$12,000	97%
$12,000	$14,000	96%
$14,000	$16,000	95%
$16,000	$18,000	93%
$18,000	$20,000	91%
$20,000	$22,000	89%
$22,000	$24,000	87%
$24,000	$30,000	85%

Looming deadline

As the law stands, VA cannot guarantee a home loan for a World War 2 veteran after July 25 next year—and VA officials have warned they will have to shut off processing of applications this fall or winter to get the expected last minute flood through the mill before the deadline.

The House has passed a bill to let VA take applications through July 25, 1957 and have another year to process them. But at mid-month, the Senate had not yet acted.

NAHB now thinks Congress should extend the old VA program just one more year to permit a smooth transition to the new setup. It wants the whole program handled on FHA's valuation basis, with VA's price-ceiling CRVs junked.

Critical report from Gen. Bradley

NAHB's new stand is even more moderate than the recommendations of a Presidential commission headed by Gen. Omar N. Bradley, onetime VAdministrator. The Bradley study urged that veterans be granted two more years—until mid-1959—to apply for GI loans. It also urged transfer of the GI housing program to FHA after that.

The Bradley report, like Rep. Teague, is sharply critical of how the VA home loan plan has worked out. Chief complaints:

1. It has been inflationary because "many of the loans were [made] among marginal groups due to the easy terms." Said the report: "These terms encouraged building even in the face of rising costs and thus contributed to . . . inflation. In addition, they tended to lead competitive means of financing to use still easier terms, causing still more pressure on limited supplies of labor and materials."

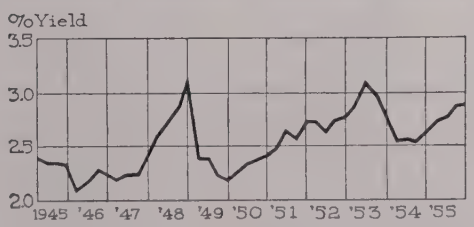
2. Because interest rates are fixed by Congress, it has hit peaks when the cost of money is low (see charts). This "tends to create fluctuations in the over-all business cycle. . . ."

3. High discounts, paid indirectly by the veteran, rob him of the supposed "veteran's benefit" and the house "may be costing him as much or more than if he financed the loan by conventional means." (The Bradley commission urged, however, that discounts "be openly recognized as a cost of making the loan" because "if a buyer knows all the components of cost, it should help discourage unsound loans.")

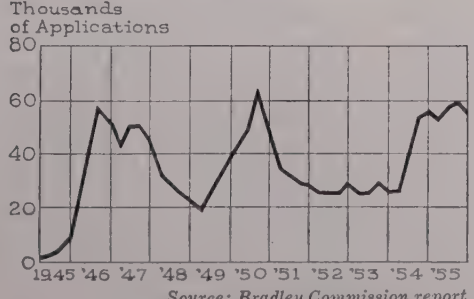
What Congress may do was still unclear at mid-month. NAHB's new stand should be a powerful boost for letting the VA program die quietly and gradually—without a sudden drop in housing output that probably would result if the rigid deadline stands. But at least two other schemes are before the nation's lawmakers.

Sen. John Sparkman (D, Ala.) has proposed a flat three-year extension of the VA program. Rep. Dante B. Fascell (D, Fla.) is urging a three-year extension on a sliding scale, as proposed by the US Savings & Loan League (May, News). Each World War 2 veteran would get a one-month extension beyond July 25, 1957 for each two months in service.

YIELDS ON LONG-TERM GOVERNMENT BONDS



AND VA HOME LOAN APPLICATIONS



Source: Bradley Commission report

Comparison of trends between yields on government long-term bonds and applications for VA home loans (both by quarters) shows the program has flourished only in spells of cheap money and low interest rates—two items that generally go with rising prices and even inflation.

Producers Council finances new BLS study of housing

The most thorough study yet of the characteristics of new housing will be made this year by the Bureau of Labor Statistics.

BLS' field staff will interview builders throughout the country to find out what kinds of homes are being built, what they're made of, how big they are, how they're heated, what types of equipment they contain and how much they cost. It is estimated the survey will cover 40,000 to 45,000 homes started in the first quarter of 1956.

The Producers' Council is paying $43,500 of the survey's $48,500 cost. The money was contributed by 33 manufacturers and groups.

New census of housing wins House approval

A nationwide housing inventory, the first since 1950, has been virtually assured with House approval of a $1 million Commerce Dept. appropriation for that purpose. The Senate, which has yet to act, has approved such projects repeatedly. The Census Bureau would gather the data either in November or next spring. Results would not be known until late 1957 or 1958. One statistical gap the industry hopes to close: the number of houses lost each year through fire, storm and demolition and the state of repair of the nation's housing.

The House has also approved a $350,000 budget increase for Commerce to study the housing fix-up market. Commerce's construction department chief, Walter Schneider, also expects to study what the material requirements are per $1 million in construction.

Both appropriations, though welcomed by housing leaders, were substantial reductions from the original requests: $1,800,000 for the housing census and $600,000 for the fix-up market study. The House inconsistently—but because the matter came before different committees—killed a BLS request for $75,000 to parallel Commerce by studying labor requirements in $1 million of building as well as an HHFA request for $175,000 to finance a study of housing demand.

FHA plans $300,000 technical test program

FHA has earmarked $300,000 of its new budget for a new technical testing program to "keep up with advancing technology in the adjustment of our construction standards." There would be an additional $40,000-50,000 for supervision, to be centered under Chief Architect Neil Connor.

FHA plans to farm out all the testing work to recognized experts like the Bureau of Standards, Dept. of Agriculture's Forest Products Laboratory or to private researchers. It thinks the program will help settle arguments over whether new minimum property requirements are too strict, too.

MILITARY HOUSING:

Can localities tax Wherry houses? High court to rule

Can local communities collect real estate taxes on Wherry Act military family housing?

The US Supreme Court was pondering the question last month. Its decision will affect some 100,000 units at military bases across the nation.

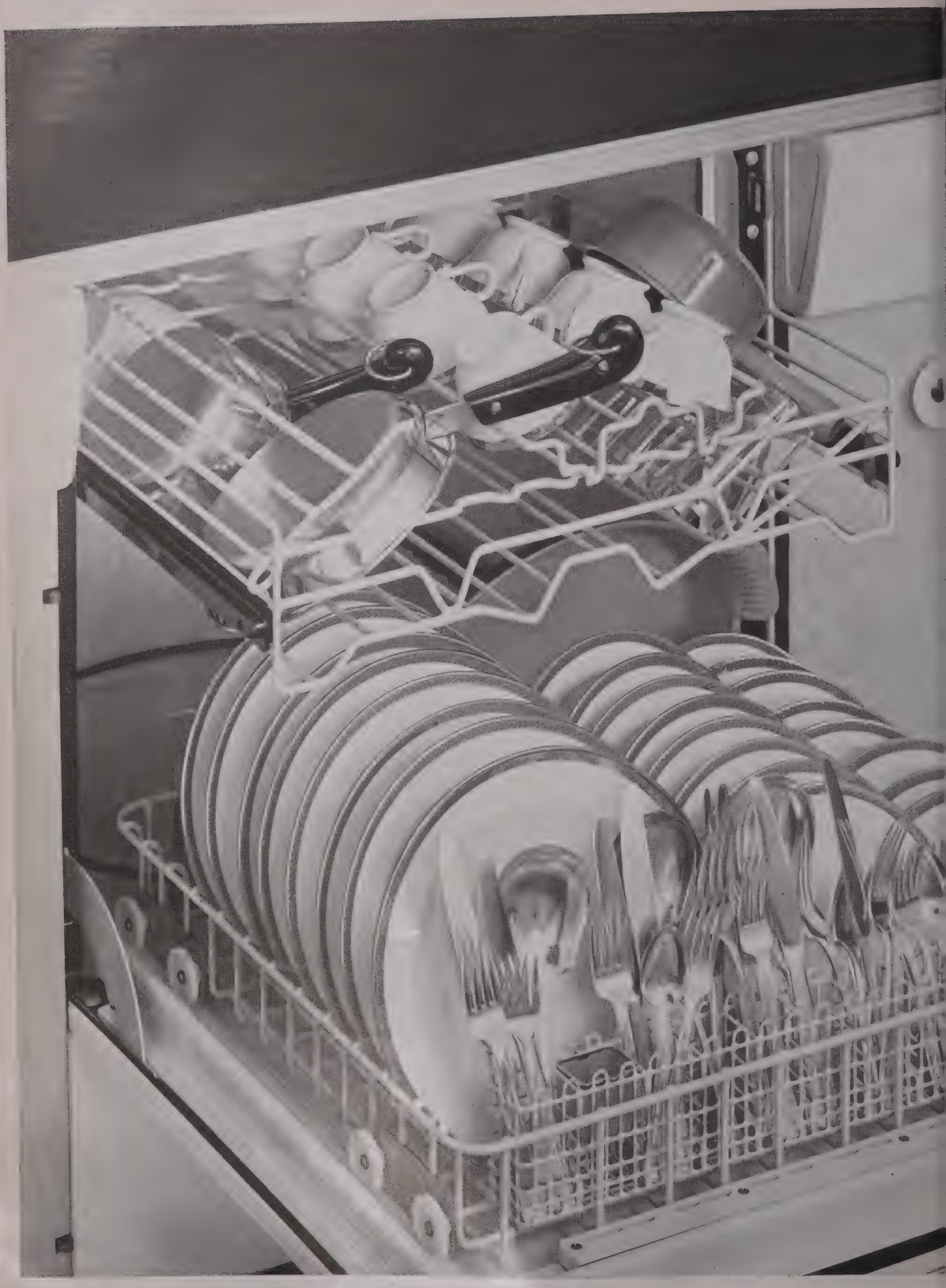
If the court rules localities can levy taxes, rents will jump so much on many a project that Pentagon officials fear wholesale vacancies, perhaps foreclosures.

At issue is the effort of Sarpy County, Neb. to collect some $100,000 in taxes covering a four-year span from Offutt Housing Co., which operates 611 units of Wherry Act FHA Title VIII housing at Offutt Air Force Base, headquarters of the Strategic Air Command, on a 75-year land lease.

The Sarpy County district court held the local tax authority had no jurisdiction over the units, which lie on government land. But the Nebraska Supreme Court reversed the decision. The appeal was argued before the US Supreme Court April 30, so a decision is expected this spring.

Sarpy County argues it can tax the units as personal property. If the Supreme Court agrees, say Air Force officials, the rent increase will be minor at Offutt Field—only about $6 a month. But

continued on p. 62



Here's the feature that will close the sale—fast

One look at this Frigidaire Dishwasher and any woman born will say, "This is my dream house." A home, free of the 3-times-a-day dishwashing routine, a housewife's most detested chore.

Particularly, she will be enthused about a Frigidaire Dishwasher —because this one's a *pan*-washer, too. With king-size capacity, it takes care of all the dishes and kitchenware for a dinner for eight. For the average family it means just pushing a button once a day— "and walking away."

And *you* will like this—this new Frigidaire Dishwasher is quickly and easily installed in place of any 24″ standard cabinet, requires no extra-cost pump as gravity drainage dishwashers do. The same pump that recirculates the water also pumps the water out of the tub.

Of course, behind the buying appeal of Frigidaire equipment is the largest, best-organized service force in the field. It assumes full responsibility for the continued satisfaction of your customers.

Remember, Frigidaire is a name you can count on—for sales appeal, and lasting customer satisfaction.



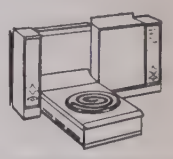
FRIGIDAIRE

AUTOMATIC DISHWASHERS

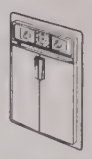
GM GENERAL MOTORS Built and Backed by General Motors



BUILT-IN COOKING TOPS



EYE-LEVEL SURFACE UNITS



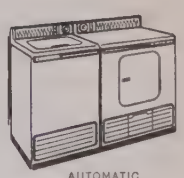
WALL OVENS



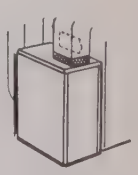
FREESTANDING RANGES



REFRIGERATORS

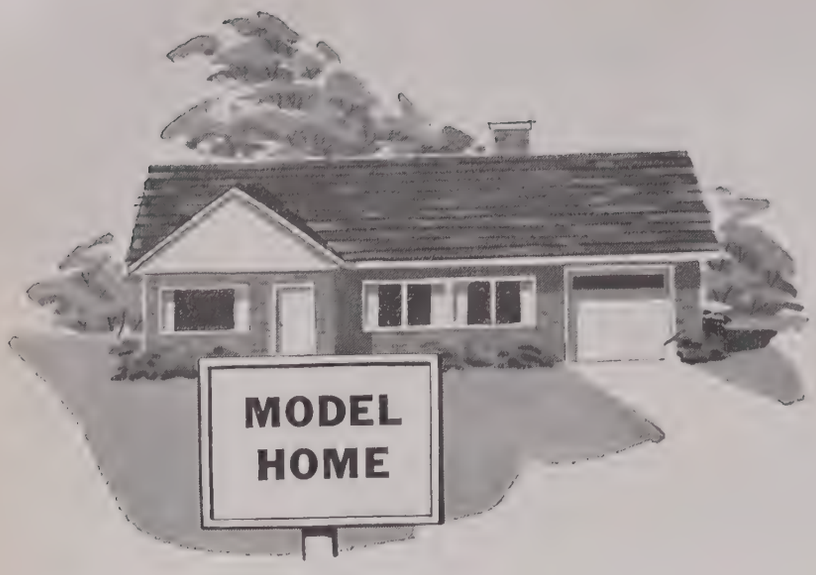


AUTOMATIC WASHERS — ELECTRIC DRYERS



HEATING PLANTS
AIR CONDITIONERS

Frigidaire offers ALL "Heart of the Home Appliances"



Mr. Builder:

Will Electric Heat Sell Homes?

Electric Home Heating is the dramatic, new application of electric power that captures the imagination of home buyers all over America. Paced by the fabulous growth of the electrical industry, Electric Home Heating has all the Sales Magic of a radically new and different way of heating. Never before has so much interest and attention been focused on the benefits of electric living. Now you can add Electric Heating to the latest electrical developments that help build sales for you.

IT'S ALL SET

After careful design and development the stage is set. As the world's largest manufacturer of electric heating equipment, Edwin L. Wiegand Company offers you an unmatched line of electric home heating products developed out of thirty-nine years of pioneering in the design, development and application of electric heat exclusively.

PROMOTION HELP, TOO!

A complete packaged promotion program is ready to help you exploit Electric Home Heating in your market. Backed by strong national advertising, it will put the dramatic new sales appeal of Electric Home Heating to work for you.

Write, wire, or phone your nearest Chromalox Representative . . . he'll help you with information, ideas, and applications of Electric Home Heating.

Edwin L. Wiegand Company
7770 Thomas Boulevard, Pittsburgh 8, Pennsylvania

CHROMALOX
NAME IN ELECTRIC HEAT

continued from p. 59

the ruling would likely have a devastating effect elsewhere.

Many a tax-hungry local government has tried to tax Wherry Act leaseholds and a rash of litigation is pending in lower courts. Says an Air Force legal officer: "In one Massachusetts case, we are faced with a rent hike of $28 a month if the local government wins out in its attempt to tax a Wherry leasehold. This could close up the project. The lower court ruled the tax cannot be applied, but the case is being appealed."

Under the new version of FHA Title VIII military housing, the Capehart Act program, localities will be completely unable to levy taxes, Air Force legal men think. Reason: the new setup is too nearly like government-owned quarters.

FHA stiffens its attitude on refiguring appraisals

FHA has stiffened its attitude toward rejiggering appraisals on military housing.

Senatorial eyebrows shot up when the agency upped its valuation $180,000 *after bids were taken* on the first Capehart Act project at Abilene, Tex. Air Force base. The increase was vital to make the low bid less than FHA's estimate of replacement cost and permit the project to go ahead without rebidding.

When the same situation arose again, Pentagon officials revealed last month, FHA declined to boost its valuation enough to cover the low bid. So the Army had to postpone awarding a contract on 221 units of Capehart housing for Ft. Carson, Colo.

Why do bids on the new breed of military family housing seem to be running above FHA estimates?

John H. Arrington, chief of family housing for Asst. Defense Secretary Floyd S. Bryant* offered an astonishing explanation last month to the House banking committee. Title VIII contracts, he said, "are essentially military construction documents, and bidders will normally figure higher allowance for overhead and contingencies than FHA field offices are accustomed to allowing."

To builders protesting against military housing programming, this looked like made-to-order ammunition. Arrington seemed to be saying that military red tape was making houses more costly than under other FHA programs.

* Bryant is a former California oil man who formerly served as assistant to the secretary of defense to coordinate recommendations of the Hoover Commission. He has just succeeded Franklin Floete, who was named GSAdministrator.

Builders, realtors protest swamping of local markets

Protests that big Capehart Act military housing programs will swamp local house markets are coming from more and more local builder and realtor groups. Items:

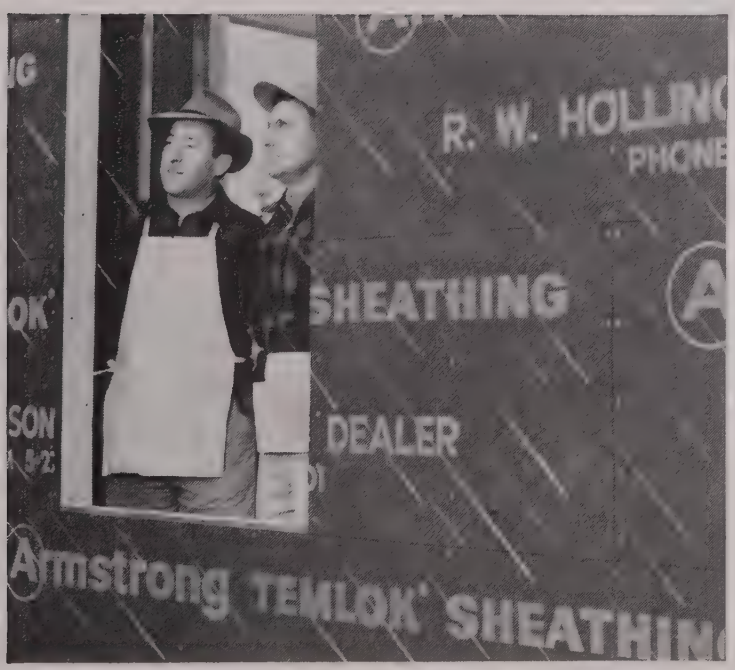
▸ In Albuquerque, N. Mex., builders complained that construction of 716 units of family housing at Sandia Army and Mamzamo Air Force bases would be a "devastating blow to the city's economy." Surprisingly, the Natl. Assn. for the Advancement of Colored People fired off this answer: "An excep-

continued on p. 66



4. CUTS LABOR TIME 35%

Each time carpenters nail a piece of Temlok to studs, they sheathe 16 square feet of wall area. They also do much less sawing and fitting . . . pound fewer nails . . . and eliminate building paper. Two men can sheathe an average house in one day, compared to a day and a half with wood. And Temlok waste is only ¼ that of wood.



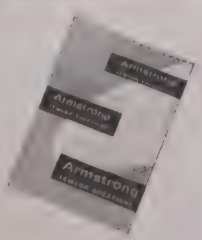
5. COMPLETELY WEATHERPROOF INSIDE AND OUT

Rainstorms won't hold up construction schedules because Temlok's exclusive Rain-Shield® finish sheds water. Your crew can resume work almost immediately after the storm. The board is asphalt impregnated to protect it even after cutting. There's no stickiness to gum up saws and hands.



6. GIVES CUSTOMERS TIGHTER CONSTRUCTION

Explain Temlok's insulating value when you tell prospects about heating or air conditioning. Emphasize how Temlok cuts down heat loss through walls, saves on heating bills . . . and how Temlok reduces cooling costs by keeping heat outside in summer.



For your free booklet on how to build with Armstrong Temlok Sheathing, write Armstrong Cork Company, 3506 Sixth Street, Lancaster, Penna.

Plan your 1956 homes with

Armstrong BUILDING MATERIALS

Temlok® Roof Deck Temlok Sheathing Temlok Tile Cushiontone® Ceilings

NOTHING UNDER THE SUN

compares with STARFIRE

ceramic-on-steel WALL TILE

Revolutionary new ceramic-fused-to-steel wall tile

Costs less

Tops in beauty and consumer acceptance

Immediately available

INTRODUCING STARFIRE . . . *the highest quality ceramic wall tile*

guaranteed for the life of the building against cracking, crazing or color fading!

economical — at prices lower than those of old-fashioned tile!

engineered to be applied directly to existing walls with a water-proof, mildew-proof white adhesive — by your personnel

simple dry-wall application cuts installation time in half — compared with old-fashioned tile

lightweight — weighs only one-sixth as much as old-fashioned tile — with the strength and durability of steel!

lasting beauty — permanent, easy-to-clean ceramic surface

NEW CREATION . . .

by Bettinger in the most advanced development laboratories in the ceramic industry, STARFIRE meets the growing need for an economical, high quality ceramic-on-steel wall tile — *the first major ceramic tile improvement in centuries!*

WRITE NOW!

PEPCO DIVISION, Bettinger Corp., Rehoboth, Mass.

I am planning _____ number of units in 1956

At present I am using _____ (type) of tile

Please send me descriptive literature ☐

Please check: ☐ Builder ☐ Architect ☐ Distributor ☐ Dealer

Name _____

Company _____

Address _____

State _____

continued from p. 62

tionally large percentage of servicemen here are Negroes and have been forced to live on the bases because no adequate housing was available to them in Albuquerque. If the association of builders had maintained a racially non-discriminatory selling policy, the pressure would not have built up and the additional 716 housing units would not be necessary."

▸ The Columbus (Ga.) Real Estate Board protested allocation of 1,000 Capehart units to nearby Ft. Benning, charging it will upset the city's economy. Maj. Gen. Joseph H. Harper, commander of Ft. Benning's Infantry Center, replied that he had asked for 3,000. Of the 1,000 approved, 750 are for noncoms, he said, and "the protest has stirred up resentment" at the base.

▸ Florida and Oklahoma Builders Assns. adopted protests. (Many areas in both states are beginning to experience rising inventories of unsold new homes.) Oklahoma builders urged Congress to create a new FHA section, with FNMA financing, for off-base rental housing for military families.

STATE LEGISLATURES:

Big middle-income housing plan voted in New York

New York's state legislature took on the mantle of the social reformer this spring, moving to set up a middle-income public housing program and end racial segregation in FHA and VA housing.

The middle-income housing plan calls for a $100 million bond issue, subject to approval by the state's voters in a referendum. Money would be loaned by the state to regulated builders who would put up housing to rent for $18 to $22 a room.

The $100 million is only half what Gov. Averell Harriman asked. The cut was pushed through by the Republican majority in the legislature.

The anti-segregation law strengthens one passed in 1955 by shifting enforcement to the State Commission Against Discrimination. Its chairman, Charles Abrams, has bitterly criticized Negro and Puerto Rican ghettos in New York.

The legislature also approved a constitutional amendment to set up a "little FHA" to underwrite housing loans by private lenders. It must be repassed by the 1957 legislature and then ratified by the voters before it is law. The proposed agency would extend state credit to banks and other lending institutions for additional housing loans in the middle income brackets.

Another new law lets savings banks make joint mortgage loans. The act permits smaller savings banks to take part in long-term financing of large buildings up to 5% of their assets.

The legislature also provides for creation of a Mortgage Facilities Corp. financed by savings banks, insurance companies and other institutions to make about $25 million in loans for new construction and rehabilitation.

Among measures vetoed by Gov. Harriman:

▸ A bill appropriating $10 million for loans to cities and housing authorities for re-lend-

ing to private owners for rehabilitation and repair of multifamily buildings.

▸ A bill to let cities engage in slum clearance and urban renewal projects, getting state funds to cover half of the amount needed to qualify for federal grants.

Among bills introduced but not enacted was one which would have allowed savings banks to set up a branch office within a 15-mile radius of the main office.

California boosts limits on State vets housing program

California's veterans home loan program, now in its 33rd year, has been brought up to date by the state legislature. The changes, which go into effect next month, are expected to produce something of a buying spree. The law makers voted these changes:

▸ Maximum loan limit on a home was increased from $8,500 to $15,000 and on a farm from $15,000 to $40,000.

▸ The limit on the full price of the property, formerly $12,500 on homes and $18,500 on farms, was lifted entirely.

To finance the bigger program, the legislature approved a $500 million bond issue. The bonds must be approved by voters in November before they can be issued. Meanwhile, the state has $80 million bond issuing authority left from $175 million approved by voters in 1954.

J. Marvin Russell, California director of veterans' affairs, led the drive for the changes in the law (with strong support from builders).

Russell pointed out to the legislators that most veterans need and want three- or four-bedroom homes. Of homes this size studied in a recent survey, he noted, only 13% were priced under $12,000.

Russell estimated that there are 1,400,000 California veterans eligible to buy homes through the Cal-vet program. So he will not approve loans for more than $10,000 until voters pass the new bond issue.

The Cal-vet program is quite unlike the federal VA plan. If a veteran wants a home under the state program, the state buys it for him and takes title. The veteran then buys it from the state on a long term lease-purchase deal—at only 3% interest. In 33 years there have been 33,000 Cal-vet loans totalling $500 million.

Kentucky empowers cities to drain land for builders

A drainage law which is expected to open up much flat land to residential development has been approved by Kentucky's legislature.

The bill, supported by the Associated Home Builders of Louisville, lets local governments install drainage systems on flat lands where surface drainage is now poor. Cost will be assessed against benefiting property owners.

Kentucky lawmakers killed a bill which would have set time limits for eliminating nonconforming buildings and land uses in zoned areas. The bill was proposed by the Louisville-Jefferson County Planning and Zoning Board but fought by Louisville realtors. *NEWS continued on p. 73.*

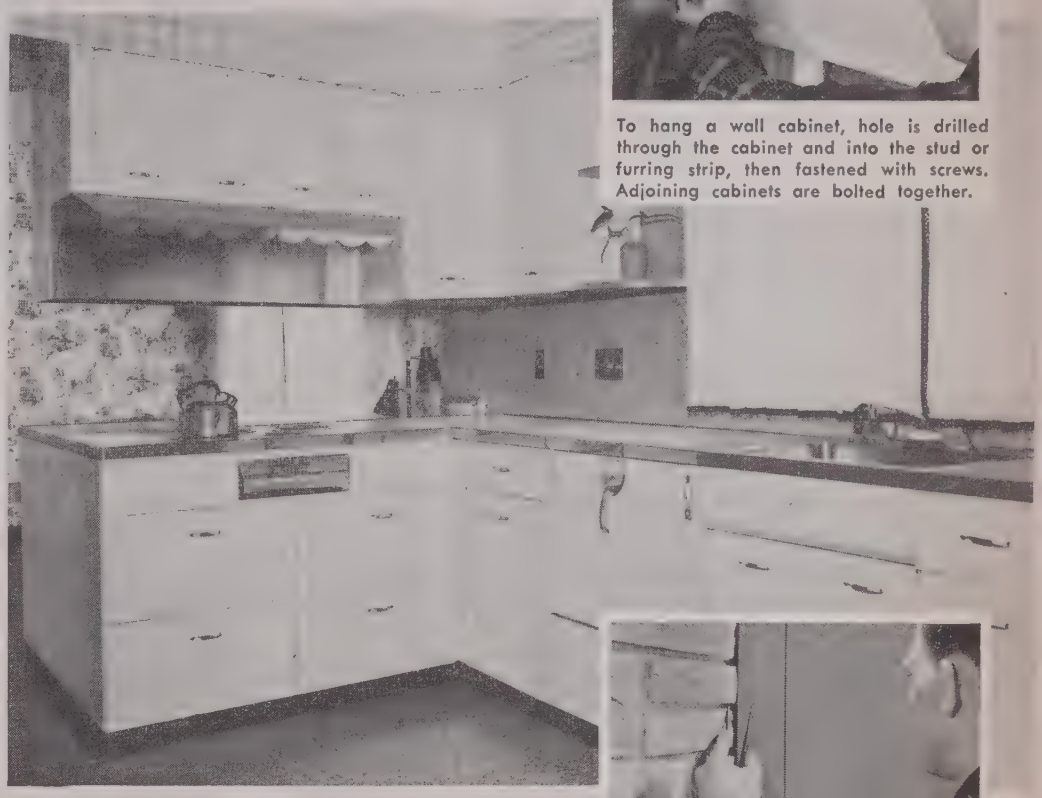
This GENEVA *Kitchen*

...installed in ONE DAY!

Wide flexibility of GENEVA lines saves man hours . . . permits tailoring a GENEVA kitchen to any room dimensions.



To hang a wall cabinet, hole is drilled through the cabinet and into the stud or furring strip, then fastened with screws. Adjoining cabinets are bolted together.



The photo above illustrates how easily a GENEVA cabinet can be fitted to even a brick wall. Filler can be accurately scribed to give tailored appearance.

There are many reasons for the rapid rise in popularity of GENEVA steel kitchens with the builder . . . excellent quality . . . greatest range of standard size cabinets . . . cabinets for most built-ins . . . color at no extra cost, to mention but a few. However, one of the most important is the fact that GENEVA steel cabinets can be installed easily and quickly, with important savings in man hours.

Learn how you can offer GENEVA . . . the finest quality steel kitchen—at a price to fit your budget.

Cabinets of Steel—for Lasting Appeal



Irregular surfaces or out of plumb walls are no problem at all. Fillers are furnished which can be quickly and easily scribed. Fillers can be cut on the job with tin snips.

GENEVA KITCHENS

GENEVA MODERN KITCHENS
GENEVA, ILLINOIS
Division of Acme Steel Company

GENEVA MODERN KITCHENS
Geneva, Illinois (Dept. HH-6-56
(Division of Acme Steel Co.)

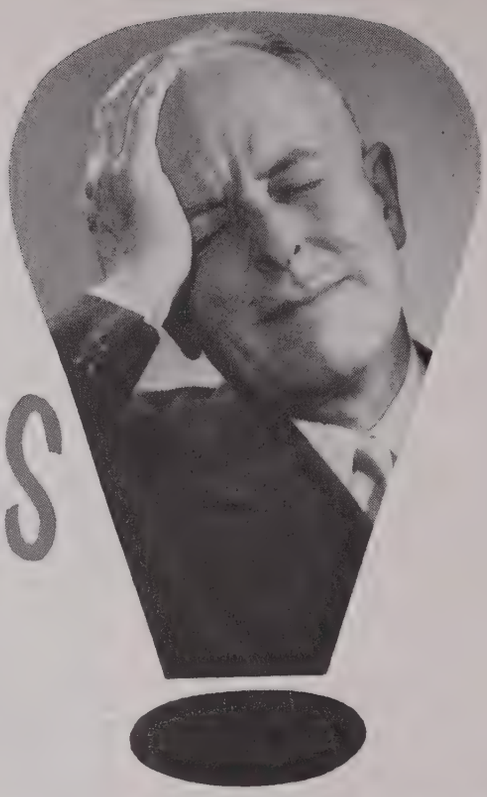
Please send details on GENEVA steel Kitchens.

Name_____

Address_____

City_____ State_____

...we can cure your HEADACHES

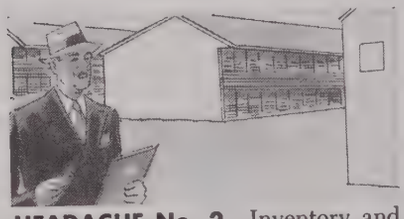


with one simple remedy





HEADACHE No. 1—Purchasing . . . this can really snow you under just when you need your time the most.



HEADACHE No. 2—Inventory and Warehousing . . . here's one that can cost you real money!



HEADACHE No. 3—Planning and Design . . . this one can swamp you with a multitude of problems.



HEADACHE No. 4—Supervision . . . this can really consume a lot of valuable time.



HEADACHE No. 5—Selling . . . this isn't easy either. There's a few headaches buried here too!



HEADACHE No. 6—Paper Work and Financing . . . The bane of every builder's existence. It's exasperating.

. . . with PRECISION HOMES these headaches are "Gone with the Wind." Your time can be spent where it does the most good, and returns the most in profit. Precision Homes builder-dealers build more . . . fret less . . . make more money! Send in the coupon *today*, and learn how *you* can rid yourself of these headaches.

PRECISION HOMES

DIVISION OF ACME BUILDING MATERIALS, INC.
5235 WINTHROP AVE., INDIANAPOLIS, IND.
JOHN E. BAUER, PRESIDENT

PRECISION HOMES, INC.
5235 Winthrop Avenue
Indianapolis 5, Indiana

Please send me complete details on the Precision Home, builder-dealer plan.

NAME_____

ADDRESS_____

_____

_____

continued from p. 67

MATERIALS & PRICES:

Big swing to central air conditioning expected by manufacturers this year

This should be the year for the big swing to central air conditioning in new subdivision homes, say most of the nation's largest air conditioning manufacturers.

This year the industry expects to produce between 160,000 and 200,000 central units, compared to last year's 125,000. And by 1966 they confidently predict the industry will be producing 1,500,000 annually with most of the new homes in the nation getting one as standard equipment.

There is a growing tendency to put a central air conditioning unit into a home as standard equipment, rather than as an option to the buyer.

Two years ago a central unit was a rarity in any but the most expensive builder homes. Today many builders are offering a central cooling unit in large projects of $15,000 to $20,000 homes.

Until quite recently most builders claimed that middle class home buyers did not want air conditioning because of the potential operating costs. But one large manufacturer, Don V. Petrone of Typhoon Air Conditioning, blames past sales failure of central units on builder, rather than buyer, resistance. He says builders would talk prospects out of buying air conditioning, claiming closet space for the unit was not sufficient and water for cooling was a problem.

Petrone, who recently signed a contract to equip 1,152 new homes near Austin, Tex. with central units, said that his firm now provides a detailed blueprint for builders to simplify planning and installation. According to the Air-conditioning and Refrigeration Institute, more and more architects and builders are designing homes to take full advantage of air-conditioning.

Cost of central units has been coming down—another factor which is expected to help sales.

Average price for a central unit for a seven-room home is now $1,000.

The manufacturers expect their total sales volume to hit $3.2 billion this year compared with $2.9 billion last year. Still the mainstay of the industry: the window unit with sales this year expected to hit 1.5 million. But this year manufacturers hope to avoid overproduction and panic-selling which characterized the window unit market in '55.

Westinghouse exec. raps air conditioning labels

Westinghouse Electric Corp. is demanding that the air conditioning industry stop putting misleading labels on central air-conditioning units.

The rule-of-thumb that 1 hp equals 1 ton of cooling capacity, long used by makers of window units, does not measure the cooling capacity of air-cooled central conditioners, the company argues.

As a result, cries Vice President Bruce D. Henderson of the Westinghouse air conditioning division, customers are getting an entirely false idea of the cost of central cooling. He says: "Comprehensive tests in our laboratories of many brands of residential air conditioners revealed that some units carry published performance figures almost 50% higher than they are capable of producing. This is a direct result of the common industry habit of using 'compressor horsepower' and 'ton of cooling capacity' interchangeably. In air-cooled units nothing could be further from the truth. A homeowner attempting to select one of the five major air-cooled home air conditioners, each claimed far and wide to be a 3-hp model, would find the actual cooling capacities ranged from 25,000 Btu/hr to 37,000 Btu/hr—a variation of a full ton in cooling capacity."

Henderson called for industry-wide adoption and enforcement of "proper rating of products."

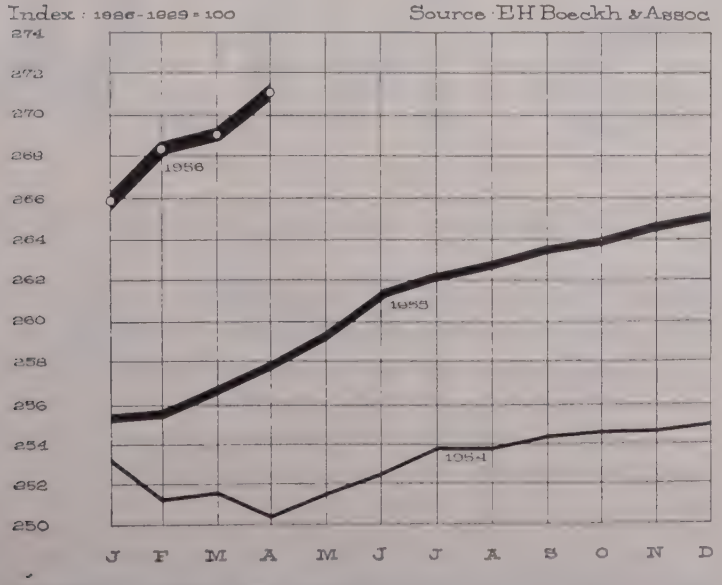
Battle of the boards ends; ALS votes for new standard

The Battle of the Boards, a complex cross-country disagreement over how thin a nominal 1" board should be, has apparently ended in a pact of peace.

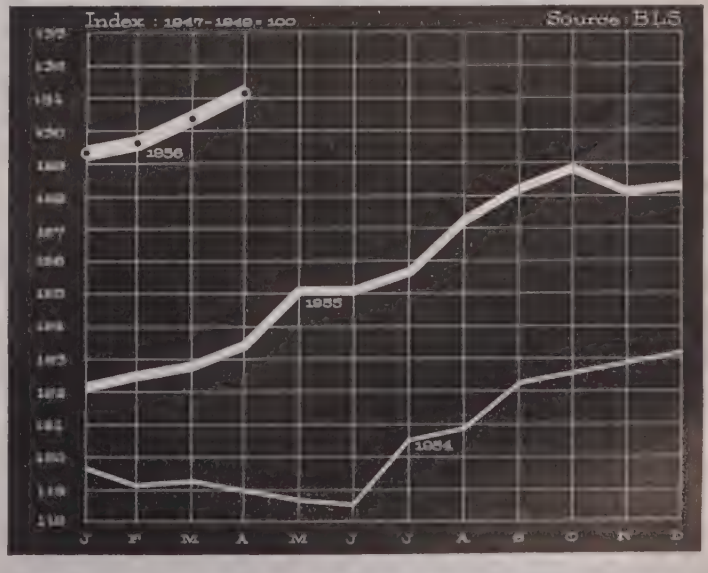
The American Lumber Standards committee, whose standards are accepted by FHA, voted to revise its rules to read that a 1" board must be no less than ¾" thick.

For reasons still not clear, the committee imposed a news ban on its Chicago session.

continued on p. 76



Boeckh's building cost index zoomed nearly two points in April, from March's 269.2 to 271.1. Col. E. H. Boeckh blamed the jump chiefly on the 6% rise in freight rates in March and similar increases in trucking and labor costs.



Materials prices climbed to still another all-time high in April: 131.2. Plywood dropped but plumbing equipment rose 0.8%, due mostly to price hikes of non-ferrous metals. Asphalt roofing shot up from 106.5 in March to 111.9 in April.



WHAT'S NEW

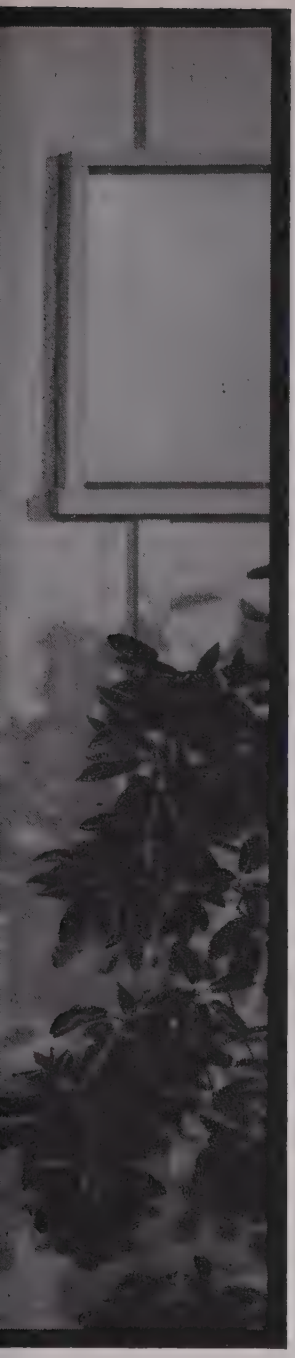
Grade for grade, Tree Life Hemlock is the best buy on the market today!*

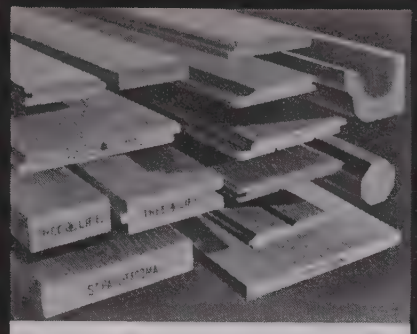
FROM California, where it's preferred for exposed plank and beam ceilings, to the Midwest where rough board and batten siding is rapidly taking hold, there is a marked swing to Tree Life Hemlock. Cost and quality-conscious prefabricators like National Homes specify it for framing. Several Northwest builders use it exclusively on luxury homes, schools and commercial jobs.

Actually, Tree Life Hemlock offers a combination of strength, appearance and low cost found in no other wood. It has greater strength-weight ratio than Douglas fir. Rivals redwood for appearance, easy finishing. Works as easily as choice white pine. Straight grain and proper drying give it freedom from warping and twisting.

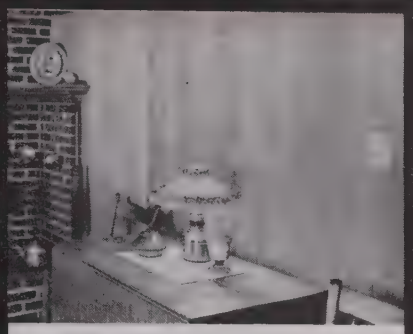
Certainly no other wood product is more carefully made. At St. Paul mills, select old growth logs are manufactured with the accumulated knowledge, skill and experience of 66 years. Tree Life Hemlock is milled full size, very carefully kiln dried, conservatively graded, fairly priced. See your supplier for details, or use coupon.

*TREE LIFE WEST COAST UPLAND HEMLOCK *is a different and distinctly superior species (Tsuga heterophylla) grown high on the western slope of the Cascade mountains. Straight grained, not brashy, it has fewer and smaller knots, NO pitch pockets.*





Tree Life Hemlock is available in all sizes, grades and patterns. End stamped for identification.



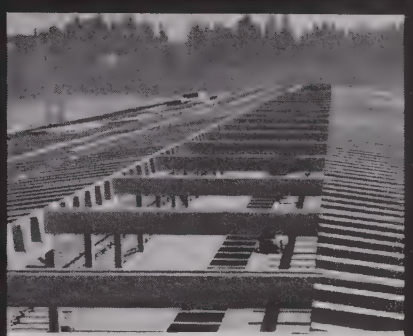
Warm, soft-toned hemlock paneling adds value, salability to any home. Takes finishes beautifully.



National Homes, nation's largest prefabricator, uses hemlock framing for panelized wall sections.



Highly durable, hemlock provides attractive and economical siding for homes, commercial buildings.



Stiff, twist-resistant hemlock structural members fully meet building code stress requirements.



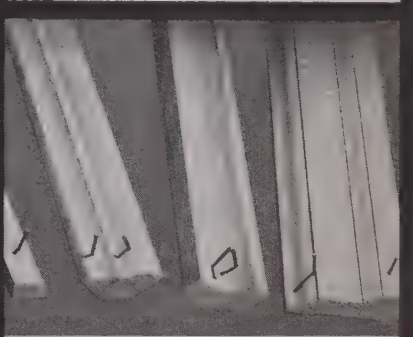
Dryness, great strength-weight ratio makes hemlock ideal for exposed plank and beam ceilings.



Ideal for cabinets and built-ins, good-looking hemlock fits trend toward natural wood interiors.



Tree Life Hemlock flooring withstands heavy wear. Actually mellows and hardens with age.



Uniformly clear grain, careful kiln drying make Tree Life Hemlock moldings easy to nail, finish.

in hemlock?

TREE LIFE®
FOREST PRODUCTS

Hemlock Lumber • Douglas Fir Lumber • Fir Plywood • Plyaloy® Overlaid Plywood Siding • PlyGlaze® High-Density Overlaid Plywood • Moire® "Brushed" Plywood • Texture One-Eleven • Knotty Pine and Cedar Plywood

ST. PAUL & TACOMA LUMBER CO.
Department HH, Tacoma 2, Washington

Please send basic Tree Life Hemlock Catalog, Specification Guide and other data.

*Name*_____

*Address*_____

*City*_____ *Zone*_____ *State*_____

THE ADDED TOUCH

to gracious living



The buffet kitchen or bar . . . in a smartly styled piece of furniture.

DWYER "400"

Ideal for the home recreation room, den or living porch.

Refrigerator, sink, cooking top and storage space combined in handsome cabinet in mahogany or blonde finish.

Write or mail coupon for illustrated literature on this and other compact Dwyer Kitchens.

Mail this coupon for full information

Name_____

Address_____

Town_____ State_____

DWYER PRODUCTS CORPORATION
Dept. D66, Michigan City, Ind.

DWYER KITCHENS

DWYER
PRODUCTS CORPORATION
Dept. D66
Michigan City, Indiana

continued from p. 73

Results leaked out several days later.

The squabble began when the West Coast Lumbermen's Assn. changed its standard for 1" boards from 25/32" to ¾". This was 1/32" less than existing ALS standards. West Coast mills candidly began stamping the boards ¾".

When FHA learned of the change, it refused to accept a ¾" thickness, arguing that a 1" board had to meet ALS specifications. FHA's regional office in Portland promptly ordered construction halted on any homes using the ¾" boards.

The resulting outcry from lumbermen and builders was echoed in Congress, prompting FHA to back down and accept the ¾" board temporarily until ALS could either reaffirm its old standards or change them.

Fir better green

When the ALS committee met early in May in Chicago the Southern pine representative promptly moved for adoption of the ¾" standard, provided the boards were kiln dried. The West Coast fir spokesman gruffly reminded his fellow lumbermen that fir is actually better for framing and sheathing if used green. It is not subject to shrinking like pine.

Though Western pine sided with Southern pine, a 5-4 majority of the committee voted with Western fir for a simple ¾" standard without regard to moisture content. Reason: ALS specs are not now based on moisture content and any regulation so based would have to be exceptionally long. And most committee members apparently felt it would be difficult, if not impossible, to enforce.

As a salve for Southern pine, the committee also approved an SP request that standards for drop siding be reduced from ¾" to 23/32" to allow 1/32" for remilling.

Producer-user poll set

Both ALS decisions go to the Commerce Dept. which will poll manufacturers to determine whether the recommendations are acceptable to a large majority. Users will also be polled, though their agreement is not as important as that of producers. If the majority approve Commerce will put the regulations into effect.

Meanwhile FHA has extended its original 30-day moratorium on enforcement of lumber standards. It will continue to accept ¾" boards.

ALS has also appointed a committee to define moisture content, though there seems to be little likelihood of agreement.

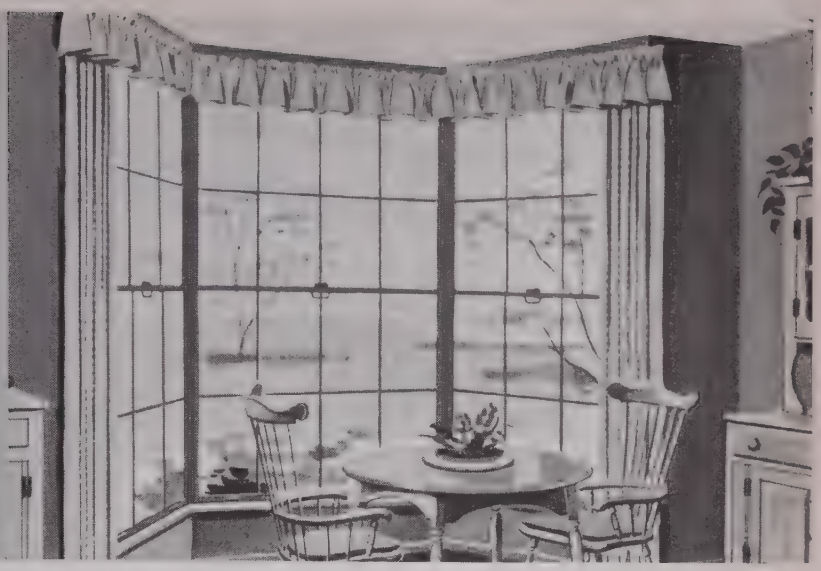
Lawsuit balks ICC ban on transit freight delays

Lumber-laden freight cars may continue to move in roundabout fashion from the West Coast to the Midwest this summer despite a government ban against deliberate circuitous routing.

Seven Oregon mill operators, who find it handy to use freight cars as free warehouses on wheels, have been granted a temporary injunction in federal court in Portland, Ore. against the ban imposed by the Interstate Commerce Commission. A three-man panel of judges is not expected to make a final ruling until shippers are well into the chronic summer freight car shortage.

continued on p. 80

Steel makes the ideal window. It can't warp, swell, shrink or rot. Steel is quick to install and to adjust. And, you simply paint steel windows to match both interior and exterior colors. Paint them right along with walls and trim. All types of Truscon Steel Windows come to you in prime condition for painting. Truscon Steel Double-Hung Windows are electrogalvanized, Bonderized and prime coat painted. Stainless steel weatherstripping and motor type spring balances are built in. Now available in window sizes up to 6′ 5½″ high and 4′ wide. Truscon Steel Casements and Ranch Windows offer the same "paint to match" features. All immediately available from Truscon warehouses all over the country. See your dealer or Sweet's File for more facts.





Now! Republic is introducing "Harmony Hues." Three lovely colors at no extra cost. Color style your kitchens in Tempo Turquoise, Largo Yellow, Prelude Pink—colors carefully selected to harmonize with all major appliances . . . whether you select them or your customers buy them later. In contemporary or traditional homes, "Harmony Hues" were created to go well with today's most fashionable decorating materials. Republic Steel Kitchens, more than ever, give you and your buyers *most for your money.* More than ever you can create customized kitchens using standard Republic cabinets. Put this dramatic, wanted feature in your homes at not one penny more! See your distributor for quick-to-the-site delivery.

Now! Truscon can offer interior steel doors finish-painted in your choice of any one of 26 contemporary colors! If you're building as few as ten houses, you can take advantage of this color feature available in lots of 200 or more swing or slide doors. Truscon Steel Doors save you dollars on framing, fitting, hanging and finishing. They're quick and easy to install. No cutting, planing, sanding needed. Now, finish-painted in color means more savings. They refuse to stick or bind because steel can't swell or warp. Truscon Interior Swing Doors are sound-deadened. Sliding Doors glide noiselessly on nylon rollers. Both types are flush, trim, modern. Get the Truscon color story from your nearest Truscon District Sales Office or send coupon below.



STEEL

and Steel Products

REPUBLIC STEEL CORPORATION
3122 East 45th Street, Cleveland 27, Ohio

Yes, I'm interested in color styling. Send me more information describing:

☐ Truscon® Steel Windows ☐ Truscon Interior Steel Doors
☐ Republic Steel Kitchens ☐ All three

Name _____ *Title* _____

Firm _____

Address _____

City _____ *Zone* _____ *State* _____

K-9684

continued from p. 76

The original seven plaintiffs have been joined in the case by 60 western, midwestern and eastern mill operators. Intervening in behalf of ICC, however, are the West Coast Lumbermen's Assn., Western Pine Assn., California Redwood Assn., and the National Industrial Traffic League.

The mill operators oppose the ICC ban since transit shipment of lumber gives wholesalers 20 to 25 days to find a buyer in the Midwest or East. If shipped by direct route from the West, the lumber reaches Chicago in 7 to 12 days.

ICC banned the practice because it will tie up hundreds of freight cars this summer amid a car shortage that may be one of the worst on record. ICC has sent its general counsel, Robert Jinnane, to Portland to fight the case. In the background is the fear that ruling against ICC would upset all car service orders across the country.

Iowa's Commerce Commission granted a 6% freight rate increase to railroads handling intrastate shipments, paralleling increases recently granted by ICC for interstate shipments. The Iowa increase does not apply to brick, tile and other clay products, gravel, limestone and gypsum rock.

LUMBER MARKET:

Plywood, lumber fail to get normal spring buying rush

Spring's normal buying rush for lumber and plywood may have slipped by with nothing more than a slight rustle.

Orders for both lumber and plywood have been trailing production for several weeks with the exception of the large, mixed-car fir lumber mills. And at mid-month the latter's favorable position was slipping.

Plywood had established a tradition, until last year, of slumping in the fall, but certainly not in the spring when things should be picking up.

Fir plywood has suffered from a weak sheathing market because of delayed building and large production since late winter. Last month, the price of ⅝" ply fell still further. Only a little was selling at $116 without an extra 5% discount. At mid-month a second 5% was appearing here and there.

This has spread even to sanded plywood, which now has ended one of its longest stable market periods in history, more than a year with a virtually uninterrupted $88 (¼" AD index grade) market level. In late April, a few sales at the $85 appeared. By mid-May, $85 was a general pattern. There is every indication the price could go lower unless housing starts pick up.

A check of plywood warehouses around the US shows they have plywood running out their ears. At best it will be a few weeks before that part of the building materials market can show any appreciable sign of a turn for the better.

Softness has appeared in random green dimension. It sagged to about $74 per M in April on the heels of renewed bad weather in eastern and midwestern marketing areas. By mid-May, it recovered to $75 to $78, not quite up to the $80 and $82 of early April when there was a brief buying rush in the face of sharply curtailed western production.

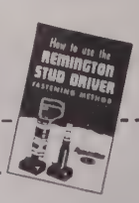
NEWS continued on p. 84



Just a squeeze sets the fastening stud in steel or concrete!

THAT'S HOW SIMPLE IT IS—a flex of the finger—to anchor fixtures securely with the Remington Stud Driver. Off goes the power load, the stud is anchored into steel or concrete—straight as an arrow. No predrilling or outside power source required!

You can set both ¼" and ⅜" diameter studs with the Remington Stud Driver—up to 6 studs per minute either size. There are 40 different styles and lengths of Remington Studs to choose from. With this *one* tool, you can take on *every* stud-fastening job—light, medium and heavy-duty—and save time and money on every one of them! Get full details by mailing coupon below.



Remington

DUPONT

STUD DRIVER

Industrial Sales Division IIH-6
Remington Arms Company, Inc.
Bridgeport 2, Conn.

Please send me your free booklet which shows how I can speed my job and save with the Remington Stud Driver.

*Name*_____ *Position*_____

*Firm*_____

*Address*_____

*City*_____ *State*_____

SPINTEX® insulation

6-4-2 specification*



Fully wrapped Spintex Blankets

available in thick blankets, 3″; medium blankets, 2″; and service blankets 1½″.

4"

Ful-Thik Spintex Batts —

the only batts which completely fill the full depth of the spaces between the 2″ x 4″ studs (actually 3⅝″). Also available in 2″ Semi-Thik Batts.



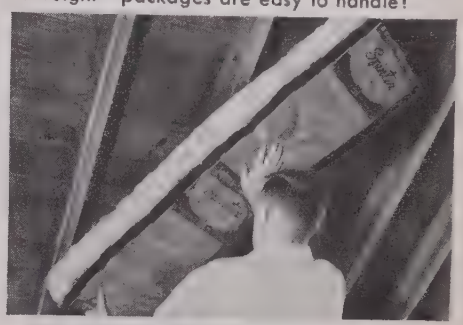
Johns-Manville

Outstanding advantages of New Spintex Batts and Blankets



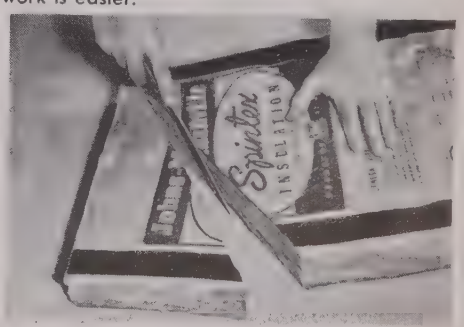
25% Lighter Weight

The new finer fibers make Spintex 25% lighter in weight—packages are easy to handle!



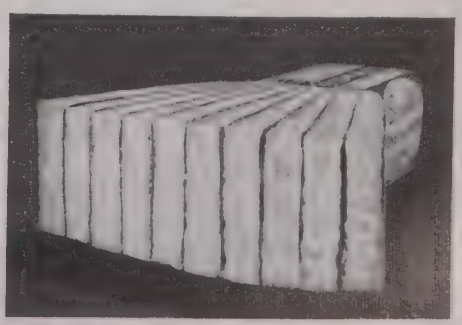
NEW Rigidity

Spintex batts and blankets have greater rigidity for easier handling, better application. They are firm and strong—hold their shape. Overhead work is easier.



Cuts Clean and Sharp

The new Spintex cuts sharp and clean with knife or saw — assures a neat fit for irregular spaces.



NEW Resilience

Finer "live" fibers of Spintex permit batts or blankets to be compressed for packaging and spring back to full thickness when opened. This resiliency assures more effective insulation.

continued from p. 80

Inland Homes, Scholz expand their operations

Inland Homes has announced plans for a major addition to its prefab plant in Piqua, O. plus a completely new plant at Hanover, Pa.

Work on both projects will begin this summer. When completed in early 1957 they will enable Inland to up production from 20 to 32 homes per day. The new Hanover plant will be headquarters for a new eastern sales division.

Scholz Homes of Toledo is expanding its operations to include schools and commercial buildings. The firm has retained Architect Richard B. Pollman, 42, of Detroit to design these buildings plus a line of Colonial homes. Pollman is also chairman of PHMI's design, research and engineering committee.

John McDonald takes helm of American Houses Inc.

John R. H. (for Robert Harrison) McDonald, 48, a carefully tailored Scotland-born engineer, took over as president of American Houses Inc. and announced plans to move the prefab company's main office from New York City to its Allentown, Pa. plant.

Natl. News & Illus.



McDONALD

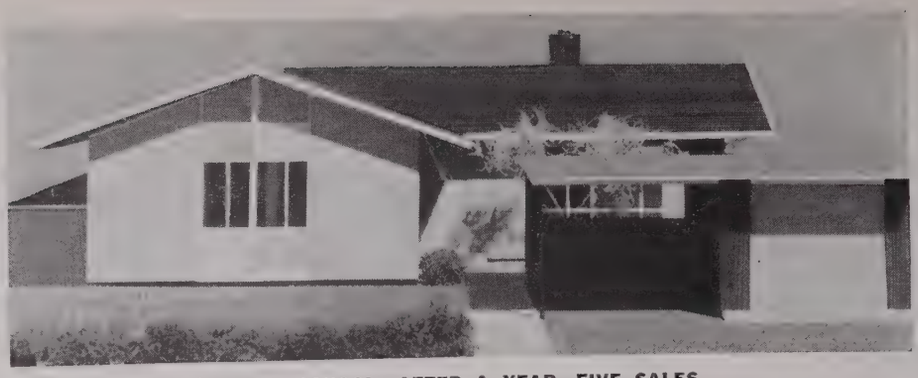
McDonald succeeds Horace N. Durston, interim president of the nation's third biggest prefabber for the last year. Durston, resuming duties as vice president in charge of production, will head up the company's plant at Lumberton, N. C. with its own sales-service staff for closer tieup between sales and service in the South.

McDonald's plans, he told HOUSE & HOME, are to intensify American's efforts in its present market east of the Mississippi (the company has a third plant in Tennessee). He hopes to hold the price line while improving the specifications of American's 81 models. Last year, he noted, the company grossed over $7 million on sales of "between 3,000 and 4,000 units, priced from $7,500 to $47,500 (most of them between $12,000 and $15,000).

American's trim (5' 10", 160 lbs.) new chief executive has been in home building and manufacturing on both sides of the Atlantic for some 25 years.

He grew up in his native Glasgow, studied civil engineering at Glasgow and Cambridge Universities and married an American girl he met while she was visiting Glasgow. His career led him into making houses to sell to contractors and speculative builders. Later, he started his own company to make wooden parts for homes. Before World War 2 one firm bearing his name reached an output peak of a house per hour.

McDonald says he got into US prefabbing by accident. During a 1947 trip to the US, Prefabber Peter Knox Jr. asked him to become general manager of the Knox Corp. plant at Thomson, Ga. In 1950, McDonald became president of A. H. Construction Co., American Houses subsidiary in Atlanta.



NATIONAL HOMES PREFAB SCHOOL: AFTER A YEAR, FIVE SALES

PREFABRICATION:

Architects, brick men attack prefab schools in Washington, D. C. area

Architects and spokesmen for brick interests are warring against prefabricated schools around Washington, D. C.

Both stand to lose their lucrative share of the high cost of school building if prefabs gain a foothold. So they are attacking prefabs as "more costly" than conventional construction.

The row came to light when the Wall St. *Journal* carried a tiny item reporting (erroneously, according to the company) that National Homes, the nation's No. 1 prefabricator, was getting out of the prefab school business because of opposition from "politically powerful local contractors, township trustees and building material dealers."

A few days later, President Fred H. Daues of the Mason Contractors Assn., rushed into print with a press release denouncing National Homes for saying what even the Wall St. *Journal* had not specifically attributed to the company. Cried Daues: "Responsible school boards, architects and civic groups have rejected prefabricated schools as excessively expensive, impractical, unsafe and conducive to substandard education. . . . The problem of fitting a school plant to an individual site—with its own soil condition, grade and orientation—is alone enough to make prefabrication of entire buildings a foolish pipe dream." The release was put out by Henry J. Kaufman & Associates of Washington—the same agency which led last August's attack on Skidmore, Owings & Merrill's original designs for the Air Force Academy at Colorado Springs because they contained too little brick.

Behind this mud-throwing lies a quietly bitter fight against prefab schools in suburban Bethesda, Md. It is led by Architect Ronald S. Senseman, president of AIA's Potomac chapter and designer of many a school in the Washington suburbs.

The Montgomery County school board, under fire recently for spending $2 million in five years on architects' fees, decided (by a one-vote margin) to advertise for bids on a 10-classroom prefab addition to the Viers Mill school. The school, designed by Senseman, is a conventional masonry structure.

Reni



SENSEMAN

The board said it was turning to prefabs to make sure the structure was ready by the start of next fall's semester. Retorts Senseman: if the county would give him the same break implicit in a prefab contract (no time-consuming delays for plan approval and competitive bid solicitation) he could have a masonry addition ready by fall, too. He branded prefab schools "an unwise experiment" that will cost more to start with than a conventional masonry structure, cost far more to maintain.

National's list price for its school is $18,000 per classroom. That is approximately $17.50 sq ft., based on a 32x32′ size. Architect Senseman recently designed a 10-room addition for another Montgomery County school which cost $121,780, and included a health room, storage room and teacher's room. Cost was $11.89 per sq. ft. On the other hand, National Homes cites a conventional masonry school in Lafayette, Ind. that cost $27,000 per classroom or $26.30 per sq. ft.

The Montgomery County school board concedes the prefab may cost more but still insists that speedy construction is all important. It cites delays on other school projects resulting from site acquisition problems and the steel shortage. The board has a National school in mind, although the bidding will be open to anyone.

National Homes is taking no direct part in the squabble. Public Relations Chief Allan Dibble admitted recently that National's prefab schools, introduced a year ago, have not been a spectacular success. So far only five have been spoken for—three in Lafayette, Ind., National's home town, one in Crawfordsville, Ind. and the fifth—if the deal goes through—in Bethesda.

Dibble says National is not interested in selling schools to anyone who wants changes in the basic plan. "We can't mass produce unless we have a mass market." National produces prefab school units only on order.

Viewing the situation from afar, the Milwaukee *Journal* offered this advice:

"With prefabricated units, it is possible to save much time and money. . . . School authorities have been ready enough to look at them, to praise them, but usually not to buy. Why? . . . Powerful building trades unions, sometimes with the weapon of building codes designed to keep local jobs for them instead of primarily protecting the public, are frequently in position to stop prefab school projects. . . . In many cases, local school authorities insist they have to have a little change here and there. That rules out the savings of prefab units. It would be like changing the basic design of a standard automobile to suit every customer.

"This seems to indicate there is not much serious worrying yet about this school building situation. . . . Not enough so that we're willing to buy classrooms as we buy automobiles—or school buses. Is this just exerting our democratic right to be different if we choose, regardless of what it costs us or our children? Or is it just because we're generally indifferent to one of the larger public responsibilities of the times?"

Two more firms enter prefab school field, third ready to

Despite controversy in Maryland, two more prefab firms have entered the prefab school arena and a third is about ready to.

Calcor Corp. of Los Angeles is marketing a classroom unit designed by Earl Heitschmidt, FAIA, long an influential figure in West Coast architectural circles and retiring first vice president of AIA.

The modular unit, with glass fiber insulation and incombustible doors, sash, roof, walls, flooring, canopy and cabinets, has an interlocking mechanism which Calcor says makes it easy to dismantle and move.

Vaughn Millwork Co. of Reno has a wood panel school with laminated wood arch roof. It says it erected a grammar school for St. Albert's Parish for less than $11,000 per classroom, or under $10 per sq. ft.

US Steel Homes is about ready to announce plans to sell prefab schools, as part of a program of prefab commercial buildings. The US Steel Corp. subsidiary already sells prefab churches. In two years, it has found customers for some two dozen, nearly all in the Southwest.

Hicksville, Long Island, schools are buying prefab classrooms from American Houses Inc. The units, designed by Architects Knappe & Johnson, sell for $9 to $10 per sq. ft., the company says.

Prefabricated — or semi-prefabricated — schools have been around for a good many years without threatening traditional piece-by-piece construction methods. But now that building enough classrooms to keep pace with multiplying subdivisions and enrollment hinges more on costs, their chances may be better. National average per classroom has climbed to $37,000. And it is still rising.

Western prefabbers eye small town markets, see big growth

The western prefab industry, which tried unsuccessfully to compete with big on-site builders in the late 40's, is showing signs of new life.

From Washington to California, prefabbers who survived the lean years—joined now by a few newcomers—see good times ahead for their industry.

While they hope to cut into the business of their on-site competitors in metropolitan areas, they think their best market lies in towns and small cities where large scale builders do not operate but builders of 10 to 20 homes a year prosper.

Gold in the sticks

Says Hugh Curran, head of Mobilehomes Corp. of Bakersfield, Calif.: "Big on-site builders aren't interested in smaller places because demand for housing isn't enough to justify volume production. But I've found we can do our best business there."

Curran estimates his firm will sell 2,000 prefabs this year. Some will be sold direct to home buyers in a project Curran is starting in Bakersfield on his own. Others will be sold through associated merchant-builders, all within 200 mi. of Bakersfield. Mobilehomes assembles its houses at the plant, hauls them to sites on huge rubber-tired dollies that require wide highways—or one-way traffic.

Most West Coast prefabbers operate, like Curran, in a limited area around their factories. Two exceptions are West Coast Mills of Chehalis, Wash. and Westway Homes, Inc. of Los Altos, Calif.

Market in the Midwest

West Coast Mills, in fact, sells most of its houses in the Midwest, ships by rail as far east as Ohio. Says Ben Jones, one of the owners: "We can compete in the Midwest because east-west freight rates are very advantageous. Rates going south into California, though, are so high and the market is so highly competitive there that we have never made any attempt to sell it."

Jones' company has 72 models in production, priced from $8,000 to $28,000 retail.

Eight-year-old Westways Homes, Inc. claims to cover 11 western states. Donald M. Grant, director of design and engineering, believes the point is nearing when prefabbers in the west will be able to compete with volume builders. "Most of our business is done with small builders but I believe that some big tract builders will gradually turn to prefabs out here as they have in the Midwest."

All the West Coast prefabbers credit better design for their recent sales success. President E. L. Schutt of Modular Homes of Del Paso Heights, Calif. (near Sacramento) believes prefab designs on the west coast today are on a par or perhaps even better than those being produced by tract builders. "When prefabbers started out here in the 40's, their homes were just boxes, so prefabs got a bad name. Now I think we've overcome that."

Both Schutt and Curran use a modular system of construction which they believe can lead to a better and less expensive home —cheaper by 10% than the best efforts of on-site builders.

Schutt, who has six basic plans retailing for $8,000 to $35,000, says he has perfected a modular scheme which lets him use less materials than in a conventional home.

Growth in components

Curran thinks western prefabbers will eventually become the biggest in the industry, marketing not only houses but also modular panels—component parts for walls, roofs and floors—which can be shipped and sold everywhere in the country.

"We're in the heart of the country's biggest lumber producing area," he added. "When construction of prefab component parts becomes big business, as I'm sure it will, it seems obvious that the center of that business will be out here."

NEWS continued on p. 90





Sell 'em faster—

Moduflow, with indoor and outdoor thermostats, glamorizes your heating-cooling systems, gives you a wonderful new selling story.

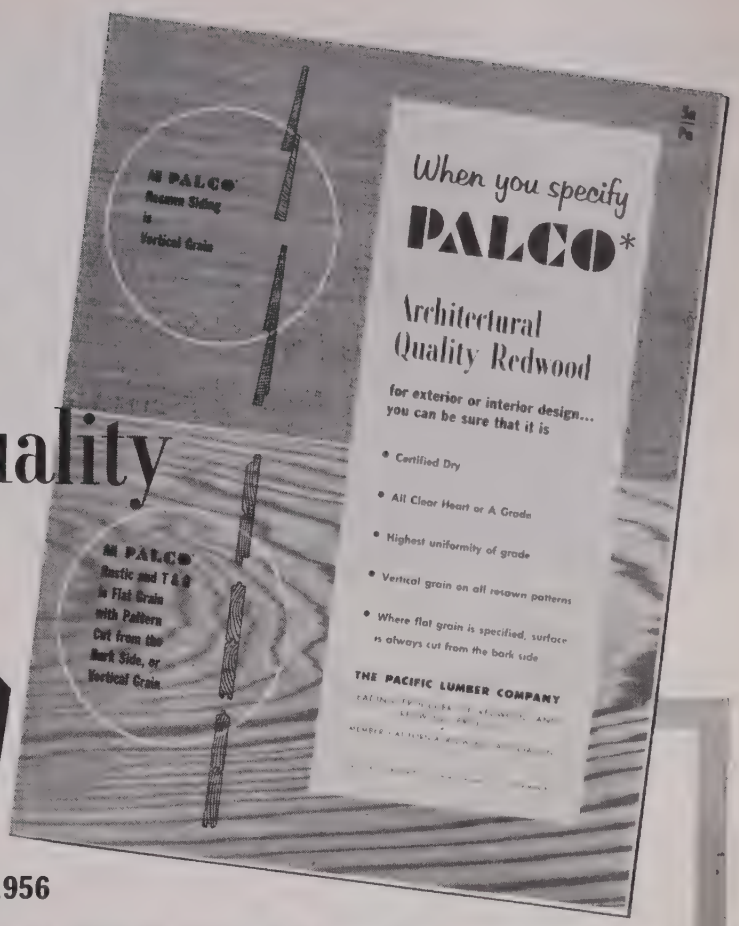
MODUFLOW brings the *selling* promise and glamour of electronics to your homes in a way your customers clearly see and understand.

First they notice the Weathercaster outside. Then, inside the house, they see the handsome Honeywell Electronic Golden Circle Thermostat. Both these features plus the unusual clock control, help you dramatically convince your prospects that Moduflow gives the ultimate in advanced home comfort.

You high light your heating-cooling system and give your salesmen new comfort to sell.

Let Moduflow start helping *you* sell more homes. See your Honeywell salesman or dealer, or write Honeywell, Dept. HH-6-55, Minneapolis 8, Minn.

To simplify specification of PALCO* Architectural Quality Redwood



SEE THIS HELPFUL NEW BULLETIN NOW

IN THE 1956

SWEET'S ARCHITECTURAL FILE

—or send coupon below for your free personal copy

Because redwood grows differently — behaves differently—and should be manufactured differently from any other wood, it possesses certain highly desirable qualities. But these advantages can be realized fully *only* when specifications call for the grade and type best suited to the intended service. In brief, simple form, The Pacific Lumber Company has outlined some basic considerations not generally known—and fully recognized only recently even by the Redwood industry itself. This information is now available to the builder or architect who specifies redwood in Section 5a-Pa of the 1956 Sweet's Architectural File—or as a direct reference bulletin available on request. Send the coupon at right for your personal copy.

Specify the best in Redwood **PALCO***

THE PACIFIC LUMBER COMPANY

Since 1869 • Mills at Scotia, California

100 Bush St.
San Francisco 4

35 E. Wacker Drive
Chicago 1

2185 Huntington Drive
San Marino 9, Calif.

*Trade Mark ®

MEMBER OF CALIFORNIA REDWOOD ASSOCIATION

Along with highest uniformity of grade, *Palco Architectural Quality* Redwood offers an exclusive combination of advantages which assure full benefit from redwood's inherent premium qualities. But because The Pacific Lumber Company has developed the most modern manufacturing facilities and procedures, you can specify this premium quality in premium wood—at no extra premium in price!

LB-505

SEND FOR THIS FREE BULLETIN or refer to it in your 1956 SWEET'S ARCHITECTURAL FILE



THE PACIFIC LUMBER COMPANY

100 Bush St., San Francisco 4, Calif. HH

Please send me, without obligation, the new bulletin outlining basic redwood specification data, with charts showing standard *Palco** redwood patterns, sizes, grades and grains.

Name_____

Title_____

Company_____

Address_____

City_____ Zone____ State_____

continued from p. 85

CONVENTIONS:

Architects ponder how to bring better design to suburbia

"American architecture is now mature; it needs only to become great," said John Ely Burchard, MIT's dean of humanities and social studies, in keynoting 99-year-old AIA's 88th convention last month.

To see what they could do about making US architecture great as well as mature, a record 2,000 architects and their wives gathered at Los Angeles' Biltmore Hotel, spent a good part of the week listening to experts' advice, participating in panel discussions, checking up on what had been done in southern California to create an "Architecture for the Good Life"—this year's convention theme. Reason for much of the soul-searching: next year will be the AIA's centennial with a big exhibition and an even bigger stock-taking yet of the architect's contribution to the American scene.

How to make good taste popular

To evaluate that contribution, according to Burchard, was not a matter of adding up the good gimmicks, of pointing to our physical ease and to our high averages. "It is a matter of things that uplift the spirit." It was a matter, too, of taking a stand on America's architectural heritage (as one Round Table pointed out), a matter of trying to integrate painting and sculpture with architecture (as another Round Table suggested), and, finally, a matter of getting architecture more deeply involved in the major forces that are shaping the American scene—the rapid expansion of cities and the growth of large suburban communities.

This problem—what to do about bringing architecture to suburbia—was the underlying theme throughout the convention.

It was faced squarely by a Round Table on "The Architect's Big New Challenge—better design for a million homes each year;" and it was given added importance by the award of this year's AIA Gold Medal to Architect-planner Clarence Stein, America's leading prophet of a better town for a better life (H&H, May).

Round Table participants P. I. Prentice, editor and publisher of HOUSE & HOME; Proctor Mellquist, editor of *Sunset;* Architects Morgan Yost, Quincy Jones, Neil Connor; Builders Fritz Burns and Tom Coogan and Savings and Loaner Howard Edgerton all agreed that the Good Life in suburbia would come about only through 1) better architect-design of individual houses, and 2) better planning of entire communities. Chief problem: too few architects seem interested in—or qualified for—this new exacting science of production housing.

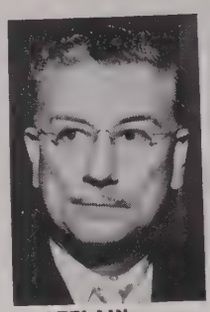
Yet as the Round Table pointed out, here is a brand new field for a profitable practice and a great new opportunity to bring the Good Life into many new communities. Prospects for more architect-participation in home building were better among the younger men, some of whom are being trained specifically to design for production.

To dramatize the new challenge of home building, the AIA (in collaboration with HOUSE & HOME, *Sunset* and 13 national organizations) this year initiated a "Homes for Better Living Program" (see p. 141). Outgoing AIA President George Bain Cummings presented the awards to the winning West Coast architects.

Chatelain named president

Elections brought no more competition for top officers than is expected at the Republican convention this year. Unopposed were Leon Chatelain Jr., of Washington, D.C., for president; Toledo's John N. Richards for first vice president (he beat Hugh A. Stubbins Jr. for second vice president last year; and famed school designer Philip Will Jr., of Chicago, for second vice president. In other no-contests, Edward L. Wilson, Ft. Worth, was named secretary and Raymond S. Kastendick of Gary, Ind., a former president of the Indiana Society of Architects, replaced new President Chatelain as treasurer.

Gretchen Van Tassel

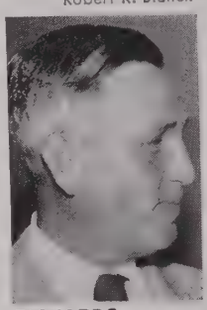


CHATELAIN



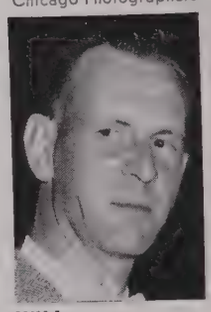
WILSON

Robert R. Blanch



RICHARDS

Chicago Photographers



WILL

Good citizen Chatelain has a lifetime record of participation in Washington community and charity organizations. His wide range of outside-the-profession contacts are relations impact of AIA's centennial year in 1957. Not bound to an ivory drawing board, Chatelain is director or trustee of banks, counted on to bolster the publicity and public S&L associations, insurance companies, was president (in 1948-49) of the Washington Board of Trade.

Good friend of both modernists and traditionalists in AIA, he has served on almost every committee, just finished two years as treasurer.

Planners agree suburbia needs new planning, zoning tools

The collision of housing with industry in the suburbs has created an entirely new problem in planning which demands an entirely new approach, says the American Institute of Planners.

During a conference on zoning standards at AIP's convention in Providence, R. I. last month planners agreed strange new nuisances are besetting suburbs as both housing and industry leave their old limits.

Said one planner: "Perhaps we need a new approach, based on performance standards instead of the old classifications of industry by name."

Thus a modern factory, now labeled simply as heavy industry, could conceivably be ranked quite high from a performance standpoint, thanks to modern techniques. It would be an unobjectionable neighbor for residential areas.

On the other hand uses now rated as harmless might rate low on performance because of blaring radios, traffic congestion or sign glare.

▸ Planners agreed that California was setting the pace for the nation in adapting its zoning scheme to modern conditions. One Californian noted that in one section of the state 45 communities and the unincorporated areas around them are all served by one regional zoning pattern. No nonconforming zoning uses are permitted and those which preceded the zoning are being eliminated.

▸ The AIP urban renewal committee called neighborhood playgrounds a must in residential areas if blight is to be forestalled. "We believe that any residential area lacking a playground within a quarter mile of every dwelling is obsolete," the report said.

The same committee recommended that AIP members use their influence to consolidate diverse programs such as highways, schools, bridges, parking lots, playgrounds into unified larger objectives so that all might have a better chance for accomplishment.

▸ Martin Meyerson, professor of planning at the University of Pennsylvania, urged planners to broaden their functions in at least five ways.

He suggested a central intelligence function, consisting of yearly market analyses; a pulse taking function, watching for signs of blight; a policy advisement function, giving city leaders detailed appraisals of various proposed courses; a feed-back review, an assessment of plans already in effect; and a watchdog function, helping to prevent costly errors before they happen.

▸ Ladislas Segoe, a private consultant for the City of Cincinnati, told his fellow planners that the best way to overcome urban traffic problems is to bring people and their jobs closer together by reversing the movement of families from urban area to suburbs.

CANADA:

Government says it may boost mortgage interest

Canada's government will see that there is enough mortgage money to keep housebuilding rolling at its present healthy clip even if this means upping the interest rate on National Housing Act mortgages from 5½ to 5¾ or 6%.

So says President Stewart Bates of Central Mortgage and Housing Corp., Canada's housing agency which functions as a kind of combined HHFA and FNMA.

Capital Press Service



BATES

Last year, Canadians started 138,000 houses —a per capita rate which would mean 1,458,500 million starts in the US. And experts have predicted a 20% increase in over-all Canadian construction spending this year (the total may reach $6.24 billion, one fifth of gross national product). So over-all construction financing may be the No. 1 reason for tight mortgage money.

Keep housing rates in line

Says Bates: "There will be a big—some think impossible—demand on capital this year. If this forces up the general rates on investment money, interest on housing mortgages will go up, too. The relationship between going rates for housing and other types of investment must remain constant if we are to get our share."

Actually, Bates' comments do not have the same weight as official pronouncements by an HHFAdministrator. Bates is the nation's top permanent civil servant in housing, but not a political appointee. The government spokesman on housing is Public Works Minister Robert Winters. But Bates, who was deputy minister of fisheries, got the $22,500-a-year CMHC job 18 months ago partly because he is one of Canada's brightest economists. And he is not afraid to speak his mind.

Interest: 5 to 5½%

Interest on NHA mortgages has varied between 5 and 5½% since the act was revised in 1954 (March '54, News).

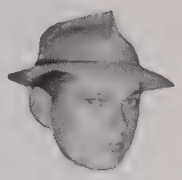
Under the old system, CMHC took 25% of a mortgage and a private lender took 75%. There was no guarantee or insurance, but the private lender got 5¾% interest on his share while the government loaned its share at 3¾%. The cost to the borrower: 5¼%.

But the government was using up big chunks of taxpayer money to support the plan, so it switched to mortgage insurance —with notable improvements over the FHA setup in the US. Biggest item: the insurance premium of 2% is paid in one piece and thus capitalized into the loan at the outset. A 20-year $10,000 loan costs a borrower $10,200. It is thereby insured for its duration. Under FHA's ½% premium paid on declining balances, insurance on a $10,000 loan would cost about $655—more than three times as much. In two years, CHMC has had no claims on its insurance reserve fund.

NEWS continued on p. 94



Above: group of Alfol-insulated Durrett homes—builder's own in foreground. Inset: Alfol Type 2, dished into the ceiling of one of the homes in progress.



"When you live in your own project, it pays to use products like Alfol!"

If they had complaints, home owners in one of Louisville's most attractive subdivisions would not have to travel far to lodge them. The builder, Jack T. Durrett, lives in his own project.

The entire development, soon to reach 150 homes, is insulated exclusively with Alfol Reflective Insulation.

"Low heating bills."

"When you live in your own project," writes Mr. Durrett, "it pays to stick with the best. . . . In the case of Alfol, my own low heating bills reflect the satisfaction of others . . . and in the summer time, I have the happiest neighbors in Louisville!"

Naturally, Mr. Durrett also welcomes the *initial* savings provided by Alfol. And the way its remarkable application speed helps keep him on schedule. But his choice of Alfol was based primarily on its proved, thorough-going efficiency.

Foil sheets self-spacing.

"*First* in Reflective Insulation," the Alfol blanket consists of multiple aluminum foil sheets that space themselves automatically, reflect 95% of all radiant heat. A tough duplex-and-kraft backing is built in to offer full application support, provide America's finest vapor barrier.

Clean, non-irritating, Alfol takes the "itch" out of insulation. And its amazing compactness (500 sq. ft. to the roll) minimizes handling and storage expense. That's why Alfol usually costs less. Your dollar buys less labor, less "overhead" . . . more and better insulation.



1 kraft-duplex backing
2 foil layers
3 reflective air spaces

Write for details.

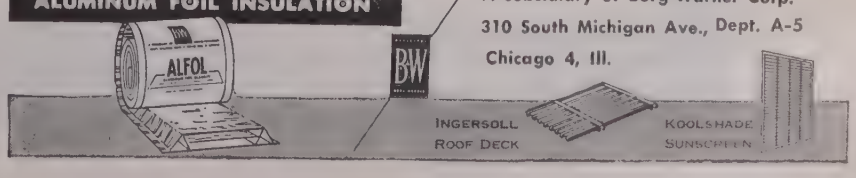
Whether you build one home or a thousand, whether you install your own insulation or buy it contractor-applied . . . it will pay you to investigate Alfol. Write today. A detailed and illustrated pamphlet will be forwarded without cost or obligation.



116-55

ALFOL
ALUMINUM FOIL INSULATION

REFLECTAL CORPORATION
A subsidiary of Borg-Warner Corp.
310 South Michigan Ave., Dept. A-5
Chicago 4, Ill.



Light for Living sells homes



Home buyers from coast-to-coast are asking for Light Conditioning

Light for Living gives homes a *visible*, *low-cost* sales plus. It's a proven traffic-builder in model homes. Makes houses in any price range more desirable.

Light for Living has given lighting new importance in the mind of the consumer. It's a vital part of the Live Better Electrically program — advertised and promoted nationally. From coast to coast television and national magazines are selling the consumer on the importance of *planned* lighting. Showing him that Light for Living makes homes more comfortable, more attractive, more useful.

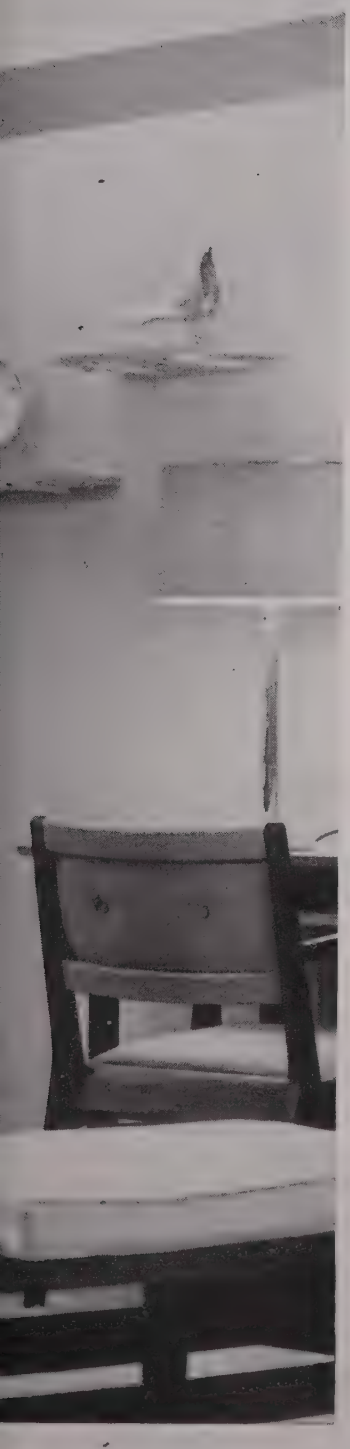
More and more prospective home buyers are shopping with Light for Living in mind—asking *for* it, asking *about* it. Here's a kit that will give you all the information you need to put the extra sales value of light conditioning in the homes you build. Seven idea-packed booklets covering every phase of lighting indoors and out. How to make rooms seem larger with valance or wall lighting. How to dramatize decorative accents with downlights or spots. How to make porches or patios more useful, how to glamorize gardens with outdoor lighting. Give your homes the sales plus of light-conditioning. Send for the builders' package. Put Light for Living to work for you.

It will help you sell more houses faster—for greater profit.

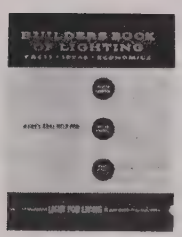
LIVE BETTER ELECTRICALLY

with **LIGHT FOR LIVING**

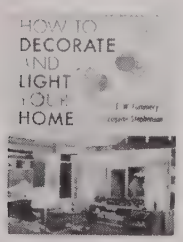
faster — *in any price range*



Complete builder's package shows you how to put the visible sales features of Light for Living to work for you



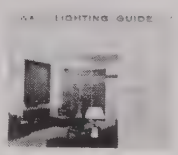
BUILDERS BOOK OF LIGHTING—Facts and ideas to help builders use better lighting to add more sales value to both merchant and custom-built houses. Shows 10 basic plans for structural lighting in complete detail. Compares Light for Living costs with cost of 39 other home sales features and shows effect of each on mortgage payments.



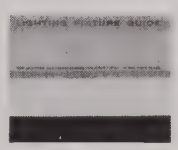
HOW TO DECORATE AND LIGHT YOUR HOME—Light for Living explained by lighting expert E.W. Commery and interior designer C. Eugene Stephenson. An indispensable guide in planning home lighting—decorating model homes. Highly praised by experts and critics all over the country, this book sold for $6.75 in the hard-covered edition.



SEE YOUR HOME IN A NEW LIGHT—The "how to" of Light for Living. A basic handbook on light-conditioning with tested recipes for every room. 31 information-packed pages with illustrations and diagrams show you how to select and place lamps for comfort and beauty.



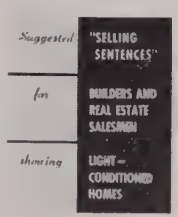
WALL LIGHTING GUIDE—The a b c's of wall lighting. Shows a variety of ways to give your homes a sales extra that is especially appealing to women. Specific detailed instructions for installation of wall lighting. Beautifully illustrated with full-color photographs.



LIGHTING FIXTURE GUIDE—Choose the right fixtures for best illumination—maximum customer appeal. Complete guide to fixture selection and placement, with lighting recipes and lighting fixture and wiring specification list.



DIMMING SYSTEMS—A dimming system will put your home in the "House of Tomorrow" class—but it need not be expensive. Complete instructions show you how to install and use dimming systems for lighting flexibility, dramatic effects.



SELLING SENTENCES—A 12 page pocket size booklet of tested sentences to help real estate salesmen demonstrate the advantages of light conditioning most effectively. A useful check list of the plus features of the light-conditioned home.

Progress Is Our Most Important Product

GENERAL ELECTRIC

CLIP THIS COUPON AND MAIL IT WITH $1.00 TODAY

General Electric Company, Large Lamp Dept. HH-6
Nela Park, Cleveland 12, Ohio

Please send me_____Builders' Kits at $1.00 each.

Name_____

Street_____

City_____ Zone_____ State_____

continued from p. 91

URBAN RENEWAL:

Mortgage Banker Ferd Kramer, pioneer in renewal, winds up a 17-year civic job

by Roy Fisher

Mortgage Banker Ferd Kramer became president of Chicago's Metropolitan Housing & Planning Council in 1939, when urban blight was a favorite topic for women's afternoon teas. The council consisted largely of the women who attended such teas, a few social service workers and a smattering of businessmen with a joiner instinct. It was a do-good group with more "good" than "do."

Last month, Kramer retired from the council's presidency. In the intervening 17 years he has helped give birth to a new era for the American city. Across the nation, cities are earnestly at work planning, conserving, rebuilding.



KRAMER

"If I have contributed to this," says the quiet, 54-year-old president of the real estate and mortgage firm of Draper & Kramer, "I think it is simply that I have helped to awaken the business and industrial leaders of our city to its importance."

What he meant—but characteristically didn't say—was that the arena of urban blight has moved from the tea circle to the action council, the city hall, state legislature and congress.

The membership of the Metropolitan Housing & Planning Council reads today more like a roster of the Chamber of Commerce than of a woman's club. Among its most active workers have been the presidents of such firms as Marshall Field & Co., Swift & Co., and Sears Roebuck & Co.

Most of them were there because Kramer had helped them to see what he saw 20 years ago: that the future of business depends much on the future of its city and that this depends upon its housing.

Even before he became president of the council, Kramer was jabbing then-Mayor Ed Kelly of Chicago to reorganize his plan commission, which hadn't met in nearly a year. He decided then that the city's (and with it Draper & Kramer's) future depended upon putting this jabbing on a more business-like basis. So he joined the council.

Under his administration, the council in 1947 developed the nation's first urban redevelopment law, prototype for parts of the Housing Act of 1949.

In 1954, the council turned its attention to conserving those neighborhoods too good to tear down but not good enough to compete. The result was Illinois' pioneering Community Conservation Act, which provides new and stronger tools for fighting encroaching blight.

Recently the council has turned to the need for coordinated planning among the 100-odd communities that make up greater Chicago.

"This," Kramer says, "is the next great challenge to the American city." He thinks the problem in Chicago may require a bi-state action with Indiana joining Illinois in the over-all metropolitan plan.

Kramer was born in Chicago Aug. 10, 1915 and educated at the University of Chicago. He married a Chicago girl and they have three children. The eldest, a girl, plans to enter Harvard school of city planning and landscape architecture in the fall as a graduate student.

Kramer will remain on the council's board of directors and keep his active post as vice chairman of ACTION.

As head of Draper & Kramer, the slender, soft-spoken Kramer does business also in St. Louis, Minneapolis, St. Paul and Milwaukee. He managed the development of Chicago's biggest slum clearance project (New York Life's Lake Meadows), built the city's largest private apartment development, is agent for Field's Old Orchard Shopping Center (1,000,000 sq. ft.), with Dovenmuehle & Co. financed the $70 million city of Park Forest, and has a new 1,500-unit slum clearance project almost ready for announcement.

To devote more time to these—and to give the council the "benefit of new leadership"—Kramer turned over the gavel to **Joseph Pois.** Pois is symbolic of Kramer's success at interesting Chicago's business leaders in urban problems. At 51, he is a successful industrialist, vice president and treasurer of the Signode Steel Strapping Co.

FHA Sec. 220—heart of renewal—picks up speed

FHA's Sec. 220 program—considered by many experts—the heart of urban renewal—is picking up momentum.

By last month, FHA was considering applications for 12 projects representing 3,357 units. The agency had made eight commitments—seven on multifamily projects and one covering 88 single-family units.

HHFA was beginning a "full-scale reappraisal" of renewal procedures aimed at cutting red tape that Congressional and other critics charge is thwarting renewal efforts.

LABOR:

Building labor winning pay boosts from 7 to 35c an hour

Labor costs are taking another upward surge across the nation this spring as the building trades demand, and in most instances get, wage boosts.

Most increases are from the 7½ to 15¢ per hour. A few go as high as 25 to 35¢. Union demands are nearly all for basic hourly wage increases without fringe benefits.

Several areas were crippled by strikes. In Cleveland, 16 building trades won a whopping 34¢ an hour pay increase (17½¢ now and 16½¢ next May 1) after a two week strike that idled 32,000 strikers, brought layoffs for 26,000 nonstrikers in allied industries and halted work on some $215 million of construction. Home builders estimated the pay boosts will add 2% to selling price of homes in what is already the nation's highest cost area.

Roofers, ironworkers and carpenters struck in central Illinois when builders would not meet demands of 25¢, 47½¢ and 22½¢ respectively. The Sabine area of South Texas was hit by a strike of six trades, all asking 17½¢ an hour on a one-year contract. Builders offered 15 and 10¢ on a two-year pact.

Omaha home builders signed one of the few contracts which called for no wage boost. Carpenters agreed to hold the wage line at $2.82½ an hour. But the contract runs only to Jan. 1. Other results of spring labor talks:

- Cement masons and laborers in northern California won 25¢ per hour boosts.
- Builders in western New York signed a three year contract with carpenters, painters and laborers with increases ranging from 15 to 50¢.
- Laborers, operating engineers and cement finishers were given 12½¢ increases in New Mexico. They will get 7½¢ more next year as provided in the two year contract.
- Laborers in Colorado won boosts of from 7½¢ to 15¢, the lower figure applying to workers in Denver whose scale is already 7 to 15¢ over that of laborers outside Denver.
- Plumbers and steamfitters in Portland were given a 20¢ boost, including 10¢ for vacation pay.
- Carpenters in southern Oregon accepted a 20¢ increase (to $3 an hour) as proposed by federal mediators after a three-week strike.

Building trades wage scale up 2¢ in 1st quarter of '56

Hourly wage scales of union building trades workers continued upward during the first three months of 1956.

They rose 0.7%, approximately 2¢ an hour, bringing the average wage for all union construction workers to $2.96 an hour.

Scales were up for one-sixth of the construction workers included in the Bureau of Labor Statistics quarterly survey. Among the individual trades hourly wage scales rose 10¢ to 13¢ an hour from April, 1955, to April, 1956.

	Average Change April '54-April '55		Rate Levels April 1, '55	
	%	Cents	Average	Range
Bricklayers	2.9	9.8	$3.52	$2.25-3.85
Carpenters	4.0	11.6	$3.06	$1.88-3.65
Electricians	4.2	13.1	$3.26	$2.35-4.00
Painters	4.4	12.3	$2.97	$1.75-3.35
Plasterers	3.2	10.5	$3.40	$2.25-3.85
Plumbers	3.9	12.4	$3.29	$2.35-3.75
Laborers	5.5	11.0	$2.12	$1.00-2.80

MATERIALS' PRODUCERS:

Appliance, plumbing firms cut back production

Mounting inventories have forced cut backs in production by several home appliance manufacturers. Norge division of Borge-Warner Corp. and GE's Hotpoint division were among those curtailing operations. Commented one midwestern appliance manufacturer: "People just aren't buying."

A reduction in production of brass fittings and plumbing fixtures at American Radiator's Louisville plant has resulted in the layoff of 380 of the plant's 2,850 workers. Company officials blamed the cut back on poor building weather this spring.

But other manufacturers expand, build new plants

While some materials and appliance makers were worrying about poor sales, production cut backs and layoffs, others were expanding plants to increase production. Items:

- Kaiser Gypsum opened an addition to its Long Beach, Calif. plant, increasing gypsumboard production there 60%.
- Whirlpool-Seeger, now RCA's appliance division, started work on a 90,000 sq. ft. addition to its Evansville, Ind. plant, first step in a $19 million improvement program.
- General Electric, with demand for washers and dryers up, is adding to that division of its Louisville appliance plant for the second time.
- Murray Corp. of America will expand its Salem, O. plant to increase production of cast iron plumbing fixtures for its Eljer division. Cost of the addition: $2,500,000. The plant expects to add 350 employes when expansion is completed.
- Armstrong Cork Co. found the market for acoustical tile so good that it has enlarged its new Macon, Ga. plant twice.

The plant was enlarged first while still in the blue print state, expanded again when only nine months old.

Two western lumber firms merge to form new giant

Merger of two of the northwest's oldest lumber firms this month will make a new giant in the forest products industry—but not the biggest.

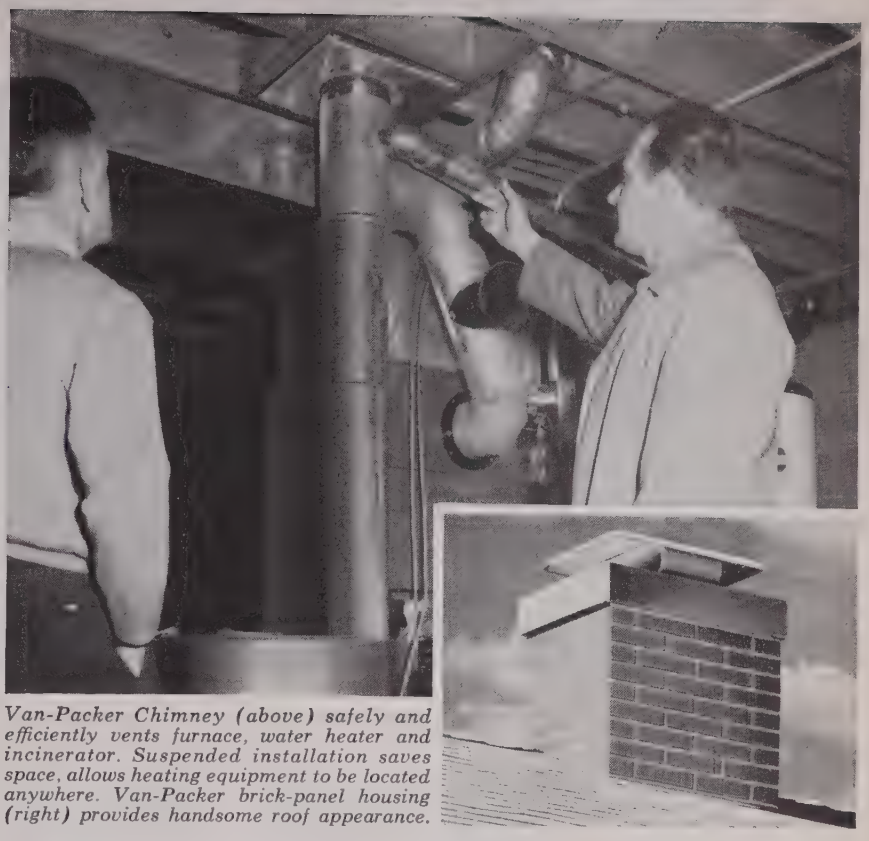
M and M Woodworking Corp. of Portland, one of the three top plywood companies in the country, is being acquired by the Simpson Timber Co. of Seattle for $50 million.

The deal will not be completed until June 21 when M and M stockholders meet in Portland but approval is regarded as a certainty.

The merger is generally considered a wise one for both firms. Simpson is a pioneer in timber management with huge timber holdings. M and M lacks timber reserves but was one of the first plywood firms to go into a nationwide sales and advertising program.

Simpson is expected to keep the M and M name, operating it as a wholly-owned subsidiary. Simpson is controlled by William R. Reed, board chairman, of Seattle. M and M is headed by Clay Brown.

NEWS continued on p. 98



Van-Packer Chimney (above) safely and efficiently vents furnace, water heater and incinerator. Suspended installation saves space, allows heating equipment to be located anywhere. Van-Packer brick-panel housing (right) provides handsome roof appearance.

Masonry Van-Packer Chimney vents furnace, water heater and incinerator safely

Safety and permanence are built into the Van-Packer Packaged Masonry Chimney. Its tile liner withstands 2100°F., completely safe even for the extremely high stack temperatures and frequent heat shocks of incinerators.

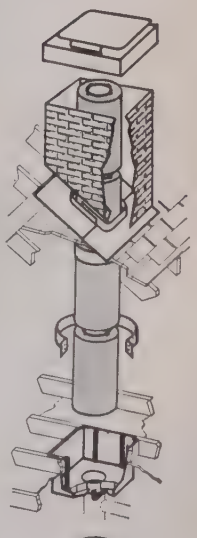
UL listed for all fuels, for all home heating plants and incinerators; approved by all major building codes. Flue sections have ⅝" fire clay tile liner, 3" vermiculite concrete insulating wall, cement-asbestos jacket.

You enjoy savings of a pre-built product with Van-Packer. Completely packaged including flashing, the Van-Packer Chimney goes up in 3 hours, saves you 20-40% over brick. In chimneys, only Van-Packer gives you permanence of masonry plus economy of pre-engineering.

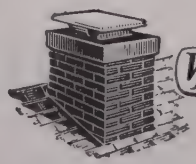
Attractive brick-panel housing, in red, buff or white, blends with any home, assures buyer acceptance.

You get greatest draft for best furnace operation with Van-Packer—proven in independent tests.

Immediate delivery to job from your local heating jobber or building material jobber. See "Chimneys—Prefabricated" in yellow pages of classified phone book, or write Van-Packer Corp. for Bulletin RS-1-19.



see our catalog in Sweet's

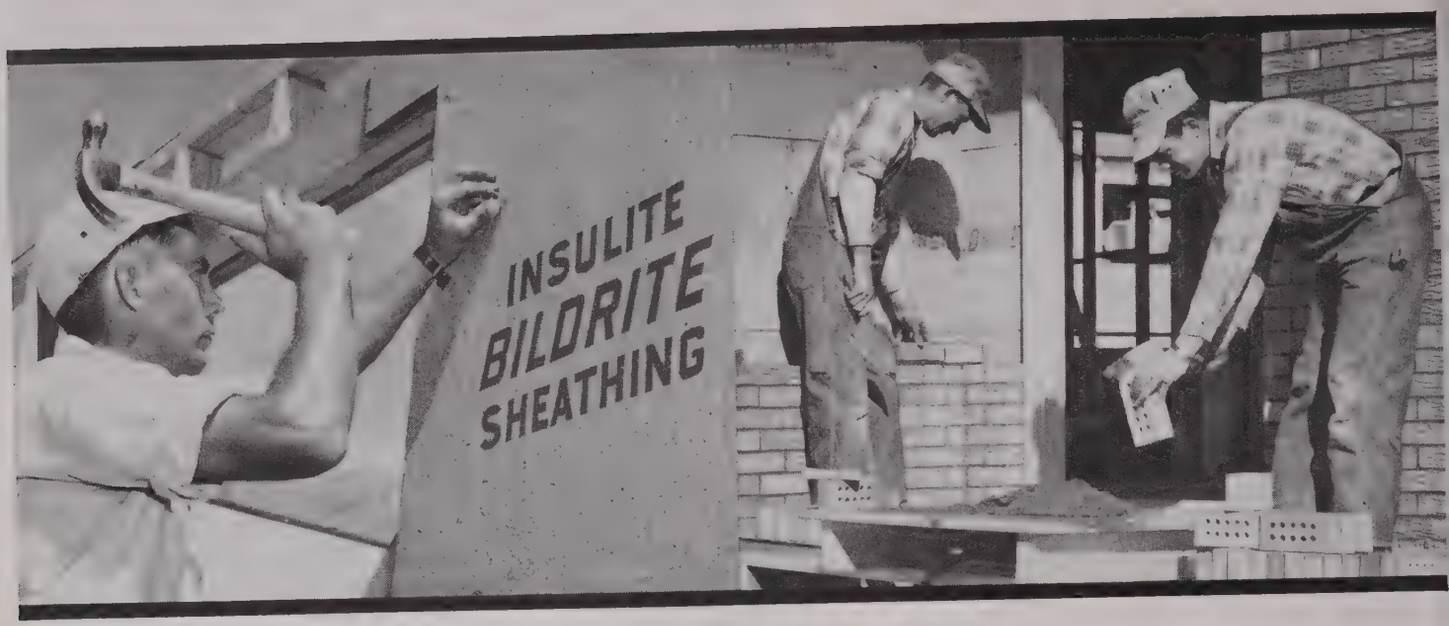


VP Van-Packer PACKAGED MASONRY Chimney

Van-Packer Corporation • Bettendorf, Iowa • Phone: DAvenport 5-2621

World's Largest Manufacturer of Chimneys

Bildrite cuts 10 hours



Easy to cut, carry, place and nail. Bildrite cuts quick and clean with power saw or handsaw. One man handles large panels with ease. On Crowell homes, sheathing time is cut *60%* as compared with wood.

Good under any exterior finish. With brick, wood or shingles you save because felt or building paper is not needed. Bildrite is protected throughout against moisture with asphalt, yet is permeable to vapor.

INSULITE, *Made of hardy Northern wood*

Insulite Division of Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

INSULITE AND BILDRITE ARE REGISTERED TRADE-MARKS



work to 4...saves $115 per home



Savings of $38 per M in labor costs alone—E. H. Crowell reports this difference between Bildrite Sheathing and wood. "Add to this all the other economies of 4′ x 8′ Bildrite," says Mr. Crowell, "and the total saving on sheathing cost can easily amount to $115 per home.

"Since the day we started in business," he says, "we've used Bildrite under both brick and wood siding. The 4′ widths eliminate need for corner bracing. I have thoroughly checked the strength, weathertightness, and reduction of waste offered by Bildrite Sheathing; and am proud to say we are consistent users." Mr. Crowell builds 20-25 homes, like the one below, each year.

Look at the detail pictures at left. Then send for complete information, actual on-the-job pictures and construction details. Write Insulite, Minneapolis 2, Minnesota.

E. H. Crowell of Toledo, alternate director of NAHB; former president of Toledo Builders Association.

build better and save with

INSULITE



continued from p. 95

PEOPLE: Walter McAllister offers resignation as head of federal Home Loan Bank Board; successor sought

Walter W. McAllister has sent to the White House his resignation from the Home Loan Bank Board, say unimpeachable sources.

McAllister, 67, has been chairman of the board during his three years as a member. Now, he wants to return to San Antonio, Tex. He was president of the San Antonio Federal Savings & Loan Assn. before appointment to HHLB July 1, 1953. His term has one year to run.

Reni



McALLISTER

One problem holding up White House acceptance of McAllister's resignation is the difficulty in finding a successor. There was strong pressure to get another S&L man in the job since neither **Ira Dixon** nor **William Hallahan,** the other two members, have S&L background.

Washington insiders said there was conflict over whether the successor, if an S&L man, should come from US Savings & Loan League or its rival, National S&L League. McAllister is a member and former president of the US S&L.

Operation Home Improvement picked **Paul B. Shoemaker** of Chicago as president and board chairman to succeed the late **F. Stuart Fitzpatrick** of the US Chamber of Commerce (Apr. News). Shoemaker is sales vice president of Masonite Corp.



SHOEMAKER



BLUCHER

Walter H. Blucher, one of the nation's top planning consultants and former (1934-53) executive director of the American Society of Planning Officials, was elected president of the **American Institute of Planners** at its Providence, R. I. convention (see p. 90).

Blucher, for 15 years a Detroit city planner, helped organize ASPO in 1934. He stepped up to consultant at his own suggestion two and a half years ago to give him more time to delve into knotty planning problems and edit *Zoning Digest,* monthly report of legal decisions affecting zoning.

Natl. Mineral Wool Assn. appointed **William A. O'Hara,** until recently district sales manager for Johns-Manville Sales Corp. in New York, as secretary. He succeeds **F. S. Sides,** who resigned.

President **H. C. Armstrong** of Williams & Co., Pittsburgh, was elected president of the **Copper & Brass Warehouse Assn.** succeeding Herbert Barchoff of New York.

Lyle F. Yerges of Chicago, manager of industrial product development for US Gypsum, was elected president of the **Acoustical Materials Assn.** He succeeds E. S. Graybill of Armstrong Cork.

George E. Schweitzer, sales vice president of Rilco Laminated Products Inc. of St. Paul, became president of the **American Institute of Timber Construction.** He succeeds **Frank B. Benzen** of Richmond, Calif.

Leon Chatelaine, Washington, D. C. designer of schools, moved up from treasurer to president of the **American Institute of Architects** (see p. 90).

Don Stofle, *sales manager for Builder* **Andy Oddstad** *in the San Francisco Bay area, has invented a new game: "Highway Scrabble." He dreamed it up when California came out this year with auto license plates with three letters before the numbers. The game is to make a word out of the three letters on the car in front of you, using the first letter for the first letter of the word, the last letter for the last, and the middle letter for anywhere in between. Samples: CUC—caustic; ERW—escrow.*

Nine building trade groups name new head men

Nine building and mortgage lending industry trade groups named new leaders.

Natl. Savings & Loan League, cruising to Bermuda for its spring meeting, installed **George W. Greenwood** as head man. He is president of Topeka (Kan.) Savings Assn. He succeeds **Allen H. Generes** of New Orleans. New vice president: **W. Franklin Morrison,** executive vice president of First Federal S&L of Washington, D. C.



STOCKER



GREENWOOD

Natl. Assn. of Mutual Savings Banks elected as president **Crawford H. Stocker Jr.,** president of the Lynn (Mass.) 5¢ Savings Bank. He has been at the same bank since the early Twenties, president since 1950.

CLOSE-UP: Fred A. Manske, production expert and research engineer, becomes president of National Gypsum

Fred A. Manske, 55, a research engineer who worked his way up through the ranks from new products trouble shooter, became president of National Gypsum Co., nation's second largest manufacturer of building materials. He succeeds **Lewis R. Sanderson,** retiring at 65 in accordance with company policy.



MANSKE

Chicago-born Manske (pronounced Manski), paid for his early education by delivering newspapers, developing a handbill business and working at 16 as a bill collector. At Armour Institute of Technology, where he graduated in 1923 as a mechanical engineer, he earned tuition grading physics papers, became student assistant to President Frank Gunsaulus. Sandwiched between these jobs, he found time to develop a 12-section engineer's slide-rule course which he sold through correspondence schools.

Manske's building industry career began as a sales correspondent for US Gypsum. Promoted to market supervisor for new and special products he traveled around the country giving technical advice to architects, salesmen and contractors and servicing complaints "too hot" for the regular sales forces to handle. He calls it "the best way in the world to learn the gypsum business." To widen his scope he studied accounting and marketing nights at Northwestern University. He holds some 20 patents on new inventions.

In 1933 Manske met President (now board chairman) **Melvin H. Baker** of National Gypsum at the World's Fair in Chicago. A year later, he was hired as assistant to the vice president for operations. His climb up the executive ladder was as methodical as befits a man of whom one admirer recently remarked: "He's a smart guy who worked damn hard." He became production manager in 1935, general production manager in 1949, vice president in charge of manufacturing in 1950, and a director and vice president for operations in 1951, executive vice president in 1954.

Manske is an early riser, gets to his desk at 8:15 a.m., works until 6 p.m.—1 hr., 15 min. after the office closes. Frequently he's in the office on Saturdays. Neither a golfer nor a clubman, Manske relaxes by swimming or working in the garden of his suburban Buffalo home.

Manske helps lead a company undergoing big growth. National Gypsum has doubled in size in the last five years and is amidst a $95 million expansion program. Board Chairman Baker (who remains chief executive officer) bases the growth plans on an expectation that full employment and "continually increasing wages" will continue the nation's enormous upsurge in consumer buying power, creating more demand for new and modernized homes.

National Gypsum's sales and earnings for the first quarter of 1956 were highest in its history. Sales of $39,509,051 were 18% above the same period last year. Earnings jumped to $4,577,694 or 28% above the corresponding 1955 period.

NAMED: **William H. Hackman,** 45, for nine years a staffer in Cleveland's FHA office, as Cleveland district director, succeeding **Ernest G. Davis; James V. Cunningham,** executive director of the Independent Voters of Illinois, as executive director of Chicago's Hyde Park-Kenwood Community Conference, pioneering neighborhood conservation group, succeeding Mrs. **Julia Abrahamson,** who resigned (April, News); **Irving Crown,** executive vice president since 1919, as president of Chicago's Materials Service Corp., the city's biggest building materials' merchant.

One reason the daily press covers housing so clumsily is that many publishers regard real estate sections as a pasture for hacks. Another is that the industry itself grabs off able newsmen almost as fast as they learn their way around its labyrinths.

Reni



KERWIN

Last month provided a good example. Young (28) **William Kerwin,** Washington correspondent for Hearst's International News Service and one of the capital's handful of press men with housing background, quit INS to become public relations boss for the Nat'l Savings & Loan League.

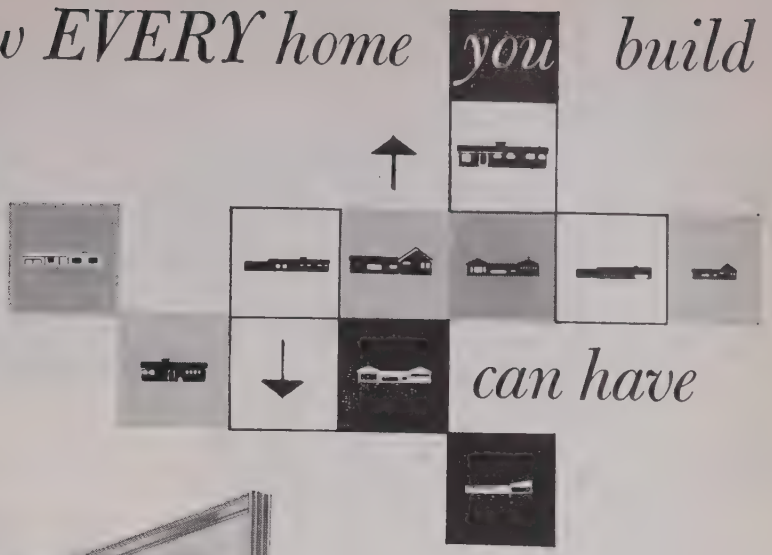
Kerwin began writing a weekly column of Washington housing news for INS in 1949. The column, first of its kind for any major wire service, succeeded well enough so United Press later followed suit (and UP's **Bob Loftus** soon moved over to NAHB's public relations staff).

Virginia-born Kerwin, who joined INS as a copy boy in 1943, has turned out his housing stint as a part-time assignment while helping cover everything from The Treasury to the Senate.

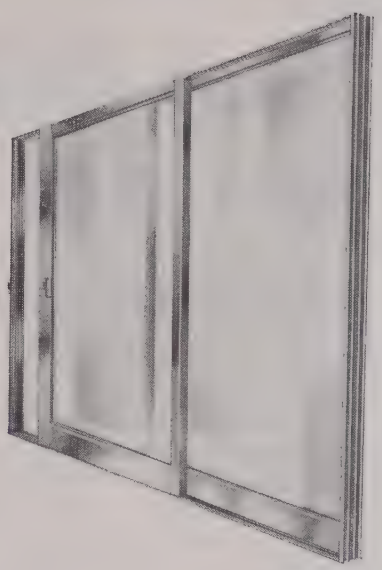
DIED: **Mark Levy,** 76, former president of the Chicago and Cook County Real Estate Boards, April 13 of a heart attack in Chicago; **William A. Eckel,** 47, Santa Clara (Calif.) builder, April 14 at Santa Clara in what police said was suicide after slaying his wife, **Ellen Ann,** 38; **Leon Fleischmann,** 77, civil engineer and former president of the Ninth Federal S&L Assn., April 16 in New York City; Architect **Albert F. Weber,** former mayor of Linden, N.J., April 22 at Linden; **Eldin H. Lougee,** 87, retired realtor and president of Council Bluffs (Iowa) Savings Bank, April 21 in Council Bluffs; Realtor **Joseph P. Grass,** 60, developer of several big Milwaukee subdivision, May 5 in Milwaukee; **Woodson D. Upshaw,** 63, Phoenix real estate developer and former co-owner of the Tucson (Ariz.) *Daily Independent,* May 11 in Phoenix; six top executives of the Crane Co., May 15 in the crash of a company plane near Louisville, Ky. The dead: **George L. Erwin Jr.,** 60, vice president; **James A. Dwyer,** 59, vice president; **J. A. McMurry,** 59, director of branches; **Charles E. Towner,** 42, asst. to the vice president; **George G. Lindholm,** 54, dept. manager, **Fred J. Wilkey,** 47, special representative. All lived in the Chicago area.

NEWS continued on p. 102

now EVERY home **you** *build*



can have



All Aluminum, Sliding Glass Doors AS LOW AS

*$90.00**

LIST PRICE

Sun Valley "jr." Sliding Doors designed, built, priced especially for low budget and multiple housing installations

Whether you are building 1 or 100 homes . . . price no longer restricts you from including aluminum sliding glass doors. Here is the ultimate in sliding doors . . . LOW COST combined with MAJOR FEATURES usually found only in higher priced doors.

You can specify Sun Valley jr. without budget fears. It's priced especially for the economy budget minded.

This is the door both builders and architects have been looking for. It's SLIM and TRIM . . . rugged construction with built-to-last quality. Check these list prices . . . see how easily Sun Valley jr. can be included in your building plans.

QUANTITY DISCOUNTS AVAILABLE

Prices on Sun Valley jr. Door

DOOR WIDTH OPENING	LIST PRICE
6′-0″ (2 panel)	$ 90.00
8′-0″ (2 panel)	102.00
10′-0″ (2 panel)	114.00
12′-0″ (2 panel)	126.00

All doors 6′-8¼″ high

***for 6 ft. wide, 2-panel door without glazing.**

Features of Design and Construction.

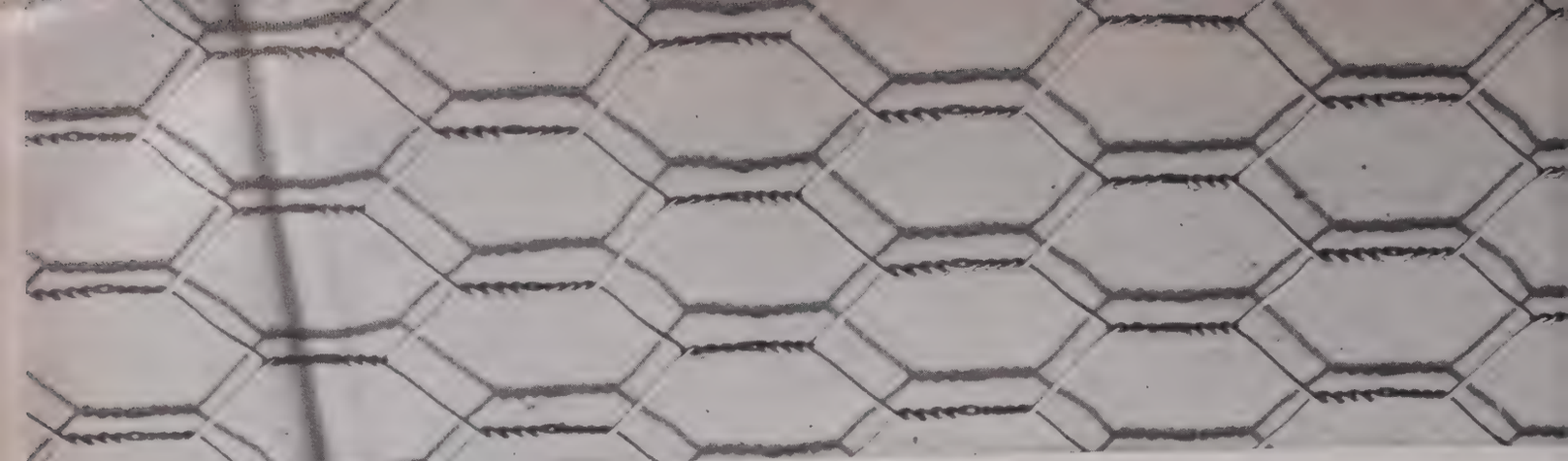
- locking stiles may be reversed permitting sliding unit to be right or left.
- units will accommodate glass of 3/16″, 7/32″ or 1/4″ thickness.
- comes complete with full jamb.

plus features

BALANCED DESIGN . . . ALUMINUM EXTRUSIONS . . . FULLY WEATHERSTRIPPED . . . EASY INSTALLATION . . . NO MAINTENANCE

For added value for your homes, see your Sun Valley dealer now or write direct to:

SUN VALLEY INDUSTRIES, Inc., Dept. 104-A
8354 San Fernando Road, Sun Valley, Calif.



add 50% greater FIRE SAFETY to lath and plaster ceilings

The simple addition of Keymesh galvanized reinforcing lath over gypsum lath increases the fire rating reference of a ceiling from one hour to one and one half hours, when finished with ½ inch of lightweight aggregate plaster.

This increased fire safety is further evidence of the exceptional value Keymesh reinforced lath and plaster adds to every building, from the low cost home to large commercial and industrial buildings. It's another reminder that Keymesh costs so little, but adds so much.

PLUS positive protection from cracking

When Keymesh lath is used, your entire ceiling and wall surface is reinforced with a vast network of multi-directional reinforcing wires, adding far more protection from cracking. This protection that stops cracks *before* they start, costs so little, but adds so much.

PLUS greater over-all strength

Keymesh lath helps the plasterer get a full, uniform thickness of plaster. With its open mesh, each wire is fully embedded, while serving as a gauge to assure the full ½" thickness of plaster specified. Full, uniform thickness assures greater over-all strength. Yes. Keymesh costs so little. Keymesh adds so much.

Recommended and used by America's leading lathing and plastering contractors.

KEYSTONE STEEL & WIRE COMPANY

PEORIA 7, ILLINOIS

KEYMESH • KEYBEAD • KEYCORNER • KEYSTONE WELDED WIRE FABRIC • KEYSTONE NAILS • TIE WIRE • KEYSTONE NON-CLIMBABLE AND ORNAMENTAL FENCE

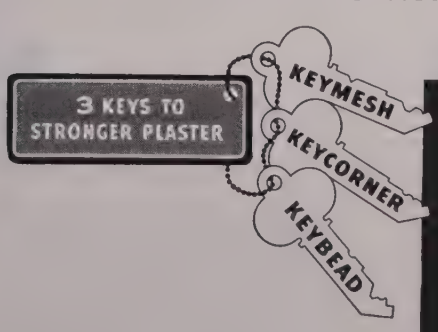
KEYMESH

GALVANIZED REINFORCING LATH

Here's all you do! After gypsum lath is applied, cover it with Keymesh. The exclusive reverse-twist weave makes it unroll flat; go up flat. It's so easy to apply. Then it's plastered, following customary practice. Proved through the years as a superior reinforcement for stucco, it now brings new value to lath and plaster construction.

it adds so much, it costs so little.

For highest quality at lowest cost, use the 3 KEYS TO STRONGER PLASTER





KEYMESH lath for over-all reinforcement. Made of galvanized woven wire. Especially recommended for ceiling construction.

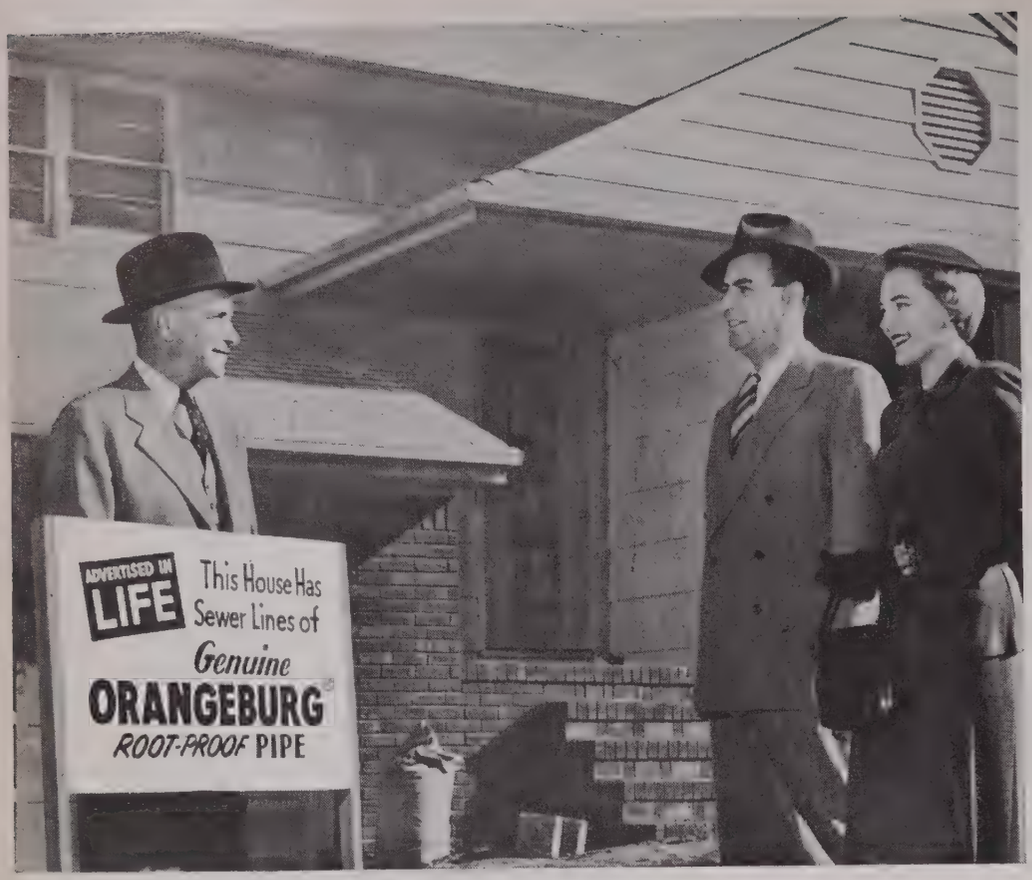


KEYCORNER strip lath, preformed to fit snugly in corners. Lies flat when applied to joints. Galvanized to prevent rust streaks.



KEYBEAD corner lath with precision formed bead for outside corners. Open mesh assures strong, *solid* plaster corners.

continued from p. 99



Builders Know Famous Brands Make Quicker Sales!

• New-home prospects have confidence in trusted brand-names like Orangeburg Root-Proof Pipe. Its reputation for high quality has helped many a builder "close the sale."

How Orangeburg Pipe saves trouble, cuts costs and builds profits for builders is a story of modern construction practice. It takes modern materials and time-cutting methods to reduce costs today. That's why home builders and general builders everywhere are turning to Orangeburg Root-Proof Pipe.

Orangeburg's long 8-foot lengths are easy to install—so strong and resilient that lines in service 50 years operate like new. Famous Taperweld Joints seal root-proof with a few hammer taps—no cement, no compounds. Orangeburg is readily cut with a coarse tooth saw and, where necessary, quickly tapered on the job with a lightweight tapering tool.

Orangeburg Root-Proof Pipe is made in 2", 3", 4", 5" and 6" sizes. Use it for house-to-sewer and septic tank connections, downspout run-offs, storm drains and other outside non-pressure underground lines. Orangeburg also comes Perforated *in 4" size for foundation drains, septic tank filter fields, draining wet spots everywhere. Look for the Orangeburg trademark. Be sure you get the* genuine. *For more facts write Dept. HH-66.*

ORANGEBURG MANUFACTURING CO. INC.
Orangeburg, N. Y. West Coast Plant, Newark, Calif.

ORANGEBURG®

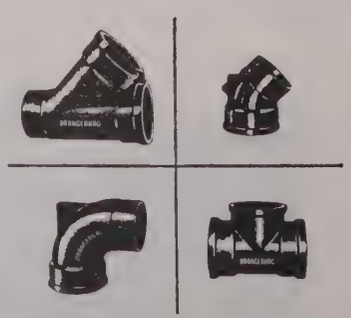
ROOT-PROOF PIPE AND FITTINGS



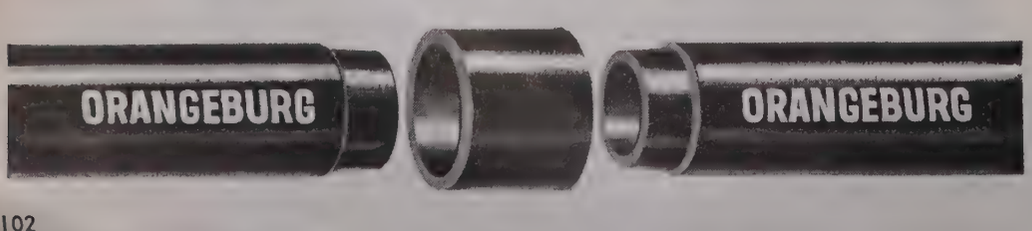
EASY TO HANDLE



EASY TO INSTALL



EXCLUSIVE FITTINGS



OPINIONS:

These intellects shed the following light on matters of moment to housing:



Joseph P. McMurray, New York State Commissioner of Housing, in talk to the Natl. Savings & Loan League:

"It is disheartening to see subdivision after subdivision being built along the same old lines as they were 30 years ago. We should not repeat the mistakes of the past, but we are. For example, we have cut up miles of open land in Queens and Nassau Counties, into gridiron subdivision of 50′ lots. We are failing to provide space for schools, playgrounds, parks and other community facilities. Often adequate streets and sewers are not being provided. Industrial and commercial encroachment is not properly prevented. Construction standards are low.

"Yet enormous amounts of mortgage investment are going into these areas, into the slums of the future. The money which you put into these developments can only be safeguarded if you insist on better planning standards. This is certainly one area in which all of us—builders, bankers, and government—have a common stake."



Corwin Mocine, Oakland, Calif., planning engineer, in SRA's *The Review:*

"The problem [of planning good subdivisions] is creating a complete and adequate environment for Twentieth Century life. It only begins with the building of houses. Planning, government and private enterprise are failing to meet the challenge. It will only be met when the scope of government and planning are made more nearly equal to the task, when citizens wake up to the disastrous consequences of inaction, when private enterprise is willing to accept a larger responsibility for its action, instead of building a house and moving on."



Westly Bowman

E. A. Leonard, president of The Lehon Company, Chicago:

"Builders will receive no thanks from the public for putting up the slums of the future. Instead of building flimsy, minimum houses in pursuit of a low price tag, builders would be better off to recondition older houses for the mass market. Many cities are helping by making slum landlordism unprofitable. To net a profit on a cheap house a builder has to leave out too much basic value. Best business opportunities lie in the direction of well-planned remodeling and better-type new housing. This also is what the nation needs."



IN SEATTLE: MODEL SHOWS HOW DIAGONAL SITING YIELDS MORE PATIO SPACE

Spring home shows drawing record crowds lured by give-away houses, design contests

Home builders, who learned some time ago that nothing perks up a slow market more than a home show, are going all out this spring.

From **Atlanta** to **Seattle,** from **Albany** to **Houston,** builder associations have put on shows which they uniformly describe as "the biggest ever." Crowds seem to back up the claim.

Biggest show of them all—probably the biggest home show in history—was in **Manhattan's** new Coliseum. Exhibits covered 300,000 sq. ft. of floor space (see p. 00). Newsworthy items from other shows.

▸ **Chicago's** show, which covered 180,000 sq. ft., featured 20 model rooms, furnished and decorated. There were 350 exhibitors. In addition, 114 builders held special showings of model homes in the area.

▸ **Seattle's** 12th annual Home Show was marked by a 2,000 sq. ft. model home on the floor of the Washington State Armory. Builder **Tom Paulsen** put it diagonally on an "inside lot" to show how such sitting can create more space for patios and gardens by Landscapers **Miller & Hansen.**

▸ **New Orleans'** show included scale models of homes which won a special architectural design contest. First place winner was **Walter G. Schleh,** Tulane University junior.

▸ **Spokane's** second home show drew 27,000 visitors, double last year's attendance. Most spectacular exhibit was a $40,000, three-bedroom home with interior walls and ceilings finished in plastic tile. Viewers, though surprised, liked the effect. Their only critical question: "What if I want to change colors?" Answered Tile Distributor **Ben J. Thompson,** who sponsored the house: "You don't."

▸ **Louisville's** show was billed as a home improvement exhibition and was sponsored by the Associated Home Improvement Contractors. Key exhibit was "The House Divided," consisting of two homes—one a typical old home, the other the same house after remodeling.

▸ **Milwaukee** realtors gave away a three-bedroom home valued at $17,600, donated by builder **Don T. Allen.** The winner and winners of other prizes valued at $8,500 were picked on the basis of 15-word written statements on better living.

▸ **Kansas City** builders created an "Avenue of Homes" exhibit—featuring photos and models of builder-produced houses.

▸ **Atlanta's** annual show, with 200 displays, included a $12,000 luxury kitchen.

▸ **Dayton, Ohio** builders featured scale model homes designed and built by high school students. Prizes totalling $3,000 in cash were awarded to the winners.

▸ **Houston** builders gave away a $20,000 home, complete with a swimming pool.

▸ **Albany, N. Y.** builders had a scale model village containing various types of northern home styles. But the real sensation of the show was a woman's hat (see photo) sporting a scale model home atop it.

▸ **Greater Eastbay** builders in California had four model homes, a swimming pool and a 50-year-old remodeled home on the grounds of the California International Home and Garden Show in Oakland. Landscape Architect Howard Gilkey, who designed the show, predicted gardens will become part of every trade exposition from homes to industrial machinery within 10 years. The show was timed to coincide with the Western Home Builders Forum, which drew 500 building men from 11 western states.



IN ALBANY: A HAT-HOUSE

▸ **Omaha's** show drew 30,000, up 2½% from 1955 and largest in its 25-year history except when lotteries were allowed and autos given away. Most popular items: electronic ranges and screen-enclosed patios. Patios are popular in Omaha because summer insects pester outdoor eaters.

FHA raps Milwaukee builders for not using architects

FHA chided Milwaukee builders for not using architects more often.

Chief Underwriter **Elmer Rathke,** speaking to the **Milwaukee Builders Assn.,** conceded "architects have been a little uppity in their attitude toward designing lower-priced homes." But he added his office was giving full credit for architects' fees in valuations. "We want to encourage a closer relation between the home builder and the architect."

Replied **Roy Healy,** executive vice president of the association: "Wisconsin architects have yet to show any willingness to cooperate with builders."

Realtor, only 3 years in field, sells 33 subdivisions

Many real estate firms have learned there is gold in project homes but it's doubtful whether any of them have found as much as **Fred W. Maisel** of Walnut Creek, Calif.

The 31-year-old Maisel is head of the fabulously successful firm of K/R Maisel. His company currently has exclusive sales agreements for subdivisions encompassing 11,000 proposed new homes which are to sell for $165 million.



MAISEL

But the amazing aspect of Maisel's story is the fact that his firm got into the project home market only three years ago. Maisel, himself, has been in the real estate business only five years.

The key to Maisel's success is simple: he is a merchandiser, not simply a sales agent although his staff of 70 salesmen and women, operating out of 14 offices in the San Francisco bay area do a lot of selling, too.

Maisel's business starts literally from the ground up. He and his aides study markets and population trends, find available land which seems ripe for development. Sometimes a home builder will take part in this pre-development study. Other times Maisel invites a builder to come into the plan after he has spotted the land. But the builder buys the land, not Maisel.

Maisel plans the subdivision and even helps plan the home designs, if the builder

continued on p. 110



Marlite Modular walls and ceilings

for greater economy, wide flexibility of design

Dimensioned for standard modular sizes, Marlite plastic-finish paneling fits right, looks right, goes up fast with minimum cost "in place." This means wider flexibility in the design of imaginative interiors . . . greater economies all along the line. And Marlite means lower maintenance, too. The baked melamine plastic finish wipes clean with a damp cloth; stays like new for years. For modern commercial, as well as residential interiors, plan on modular Marlite . . . available in Planks, Blocks, large Panels, and hollow-core Korelock in a wide range of distinctive Loewy colors, wood and marlite patterns. Consult your building materials dealer, refer to Sweet's File, or write Marlite Division of Masonite Corporation, Dept. 622, Dover, Ohio.

that's the beauty of **Marlite®**

plastic-finished wall and ceiling paneling

MARLITE DIVISION OF MASONITE® CORP.





fully laid out on rolling, beautifully wooded land where every tree was saved. It is a self-contained community with its own water and drainage system, sewage treatment plant, 17 miles of paved street and full provision for parks, schools, churches, swimming and wading pools, firehouses, a civic center and shops.

The houses, selling from $12,500 to $22,500, were designed by Architect Richard B. Benn to nestle into the hills. They are well zoned; plumbing facilities and storage are generous; most rooms are cross ventilated and all are well lighted. *All the homes feature Fenestra Steel Windows, color-styled to harmonize with the interior and exterior.* All windows are installed with Fenestra inside-outside metal trim. Screens and storm panels are included.

Fenestra Windows give Garden City families slim-trim modern design, big glass areas for more daylight and easy finger-tip operation for a lifetime. The expert use of color-styling accents the careful planning which has made Garden City so successful. Buyers are enthusiastic and sales are running far ahead of construction.

Set off your homes
with Fenestra Color-Styled Windows!

Whether you're building 10 homes or 1500 homes, you can profit by the experience of Sampson-Miller and other progressive builders from coast to coast. *You can "build-in" an extra selling feature at no extra cost with Fenestra Color-Styled Steel Windows.*

National Advertising—To help sell your homes, Fenestra is showing your best prospects the new window beauty of Color-Styled Windows with six full-page color advertisements in *Better Homes & Gardens.* Your Fenestra Representative can show you how to cash in on this powerful promotion program in your model home. Call him today, or mail the coupon below.



Fenestra®
INCORPORATED
STEEL-STRONG WINDOWS

Fenestra Incorporated
HH-3401 Griffin Street
Detroit 11, Michigan

Please send me complete information on Fenestra Color-Styled Windows for my new homes!

NAME_____

FIRM_____

ADDRESS_____

CITY_____ STATE_____

continued from p. 103

doesn't have his own architect.

He arranges the financing, both construction loans for the builder and mortgages for the buyers. He handles the paper work and FHA and VA applications.

He and his staff set up the advertising campaign and prepare the brochures. And finally he closes the deal, bringing the builder, purchaser and title company together for the closing.

His operations are a proven success. K/R Maisel had a sales volume of $32 million in 1955, handling 27 different projects. In 1956 Maisel expects to sell 4,000 homes for a volume of $50 million. He now has 33 subdivisions under his wing and more in the planning stages.

Maisel's rapid rise in the world of real estate has been phenomenal, even by California standards. He arrived in the state five years ago with a brand new degree in economics from the University of Texas. His main reason for settling in the bay area was to attend the University of California so he could get a PhD in economics.

While going to school part time, he took a job with the real estate firm that sold him his home in Walnut Creek. In two years, he was president; six months later, he was sole owner. That was less than three years ago.

Maisel recognizes his business as something unique—neither a building firm but neither simply a real estate office. His description: "It's a clearing house, taking in all the factors in planning and building a home and selling it to the buyer."

Air conditioning reaches the New York snow belt

Air conditioning has reached the snow belt in a big way.

Two new housing developments in **Syracuse**, N. Y. are offering air conditioning to their buyers.

Air conditioning is optional in three of the four models in Byberry, a 1,200 home subdivision of Scholz prefabs priced from $13,000 to $20,000. In the fourth model it is standard equipment.

Even where cooling is optional, the **Buckly Construction Co.** is building so air conditioning can be added easily later—by adding a cooling unit to the gas fired conversion heater. The installation will involve no change in duct work or wiring.

Buyers who take the air conditioning equipment as original equipment will pay approximately $900 for it. But buyers who chose to add it later will pay the same price.

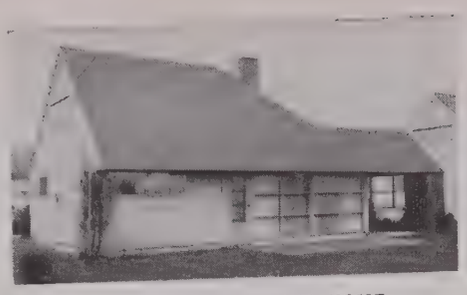
Orchard Village, a 400 home project of Builders **Ted Chapman** and **George Gloves**, has optional air conditioning in all models with no provision for later installation.

Levitt starts grading for his third Levittown

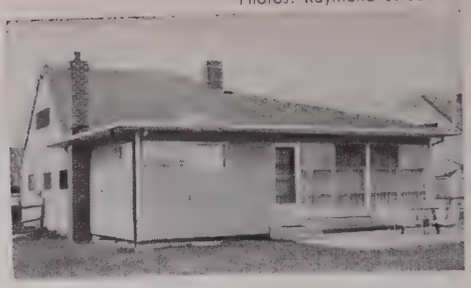
Big Builder **William J. Levitt** began preliminary grading for his third big project, Levittown, N.J.

Actual construction of houses is still perhaps two years off, but bulldozers are moving earth in one part of the 4,000-acre tract that Levitt acquired in Willingboro Township, Burlington County (Mar. '55, News).

Photos: Raymond S. Jacobs



ONCE A TWO-STORY LEVITT HOME



NOW A THREE-LEVEL SPLIT-LEVET

Conversion of two-story Levittown homes into split-levels becomes big business

Popularity of the split level home is being made retroactive in Levittown, L. I.

A new firm known as **Split-LeveT, Inc.** has been organized there to convert groups of the development's original two-story homes into larger split levels.

The company says 40 Levittown home owners have signed up for the addition at prices varying from $4,890 to $5,990 depending on the size.

Split-LeveT, Inc. was started more by accident than plan. It began when **Mr. and Mrs. Herman Fried** decided they wanted more living space in their Levitt home, a two bedroom model for which they paid $9,800 five years ago.

They retained Architect **Herman H. York**, who planned a two level addition across the rear of the existing home. The addition measures 32′ x 20′ and includes a basement recreation and utility room, an upper-level living room and new master bedroom. The home's original living room became a large dining room.

Enthusiasm of other Levittown residents who looked at the result prompted the Frieds to organize Split-LeveT, Inc. in cooperation with a group of Long Island builders who will do all the actual building work. By doing the conversions in volume, the Frieds figure they are offering an addition which would cost up to $8,000 if made to any one home individually.

Only apparent drawback to the Fried's plan is that owners have to give up a 640 sq. ft. hunk of their back yard for the addition. Levittown lots range upward from a minimum of 60 x 100.



Student builders put up this 1,008 sq. ft. house in California. Model is built on blocks so it can be moved away easily after public inspects it for two months.

Future builders at work: California college students build own house as class project

You won't find "home building" as such on the curriculum of **Pasadena City College** in California. But in truth it is as much a part of the school's course of study as rhetoric or history.

Every year for the past six, students of the building construction class at the two-year college have actually designed, built and sold a home.

The annual project was originated by **Dean T. Reinhold**, instructor of the building construction class. He decided in 1949 that the best way to let his students put their book-learning to practical use was to have them build a house—right on the campus.

The idea was endorsed by the Pasadena Board of Education, which pledged funds to buy materials. Reinhold found, however, that many local dealers were more than willing to donate some materials for the project, cost free, in return for the publicity they could get when the completed home was put on display.

Each year since then Reinhold's class has built a completely new home. It's a student project from start to finish.

This year, for example, 20 young men took part. All 20 submitted a basic plan for the house—one of which was selected by Reinhold.

Thirty-one firms supplied materials and accessories. There is no plumbing course at Pasadena College, so this work was let out on contract. Except for minor details, this was the only part of the project done by nonstudents.

The home, finished last month, contains 1,008 sq. ft. and has two bedrooms and a den, convertible to a third bedroom, a living room-dinette, kitchen and one bath. It has a counter-top stove, intercommunications sys-

continued on p. 114

Laboratory tests prove—

3M ceramic tile adhesive holds more than 1½ tons per tile

CTA 11

Offers shear strength of 150 p.s.i.; guards tile against settling cracks, vibration and water!



For your protection, testing experts put CTA 11 through its paces.

Resists Shearing

They measured the shear strength of CTA 11 bonds at normal room temperature, found CTA 11 holds more than a ton and a half per tile.

Here is strength rugged enough to keep tile from cracking with foundation settling or shaking loose under conditions of extreme vibration.

What's more, they found that CTA 11 protects installations through the whole temperature range from 20° below zero to 125° F.

Resists Water

Then they proved that rubber-based CTA 11 doesn't dissolve in water, doesn't support mold growth, stores without deteriorating.

In addition, CTA 11 is easy to handle, spreads like "butter" right out of the can, doesn't ball up under the trowel. It's vermin-proof, dries odorless.

Gain Durability Plus

What other ceramic tile adhesive offers you such dependable performance, along with all the cost-cutting ease and speed of "thin bed" setting?

Next time, use CTA 11. Try CTA 12, the 3M companion adhesive for ceramic floor tile! Both are available at your local tile distributor's. And get free literature fast on CTA 11 and CTA 12! Fill out and send the coupon below today!

PRODUCT OF 3M RESEARCH

ADHESIVES AND COATINGS DIVISION • MINNESOTA MINING AND MANUFACTURING COMPANY

417 PIQUETTE AVE., DETROIT 2, MICH. GENERAL SALES OFFICES: ST. PAUL 6, MINN. MAKERS OF "SCOTCH"® BRAND TAPES, "SCOTCHLITE"® AND "3M" BRAND PRODUCTS

MAIL THIS COUPON NOW!

3M® ADHESIVES

MINNESOTA MINING AND MANUFACTURING COMPANY
Adhesives and Coatings Division, Dept. 126
417 Piquette Avenue, Detroit 2, Michigan

Sirs: Mail me at once complete information on extra-durable CTA 11 and CTA 12 Ceramic Tile Adhesives.

Name _____

Company _____

Address _____

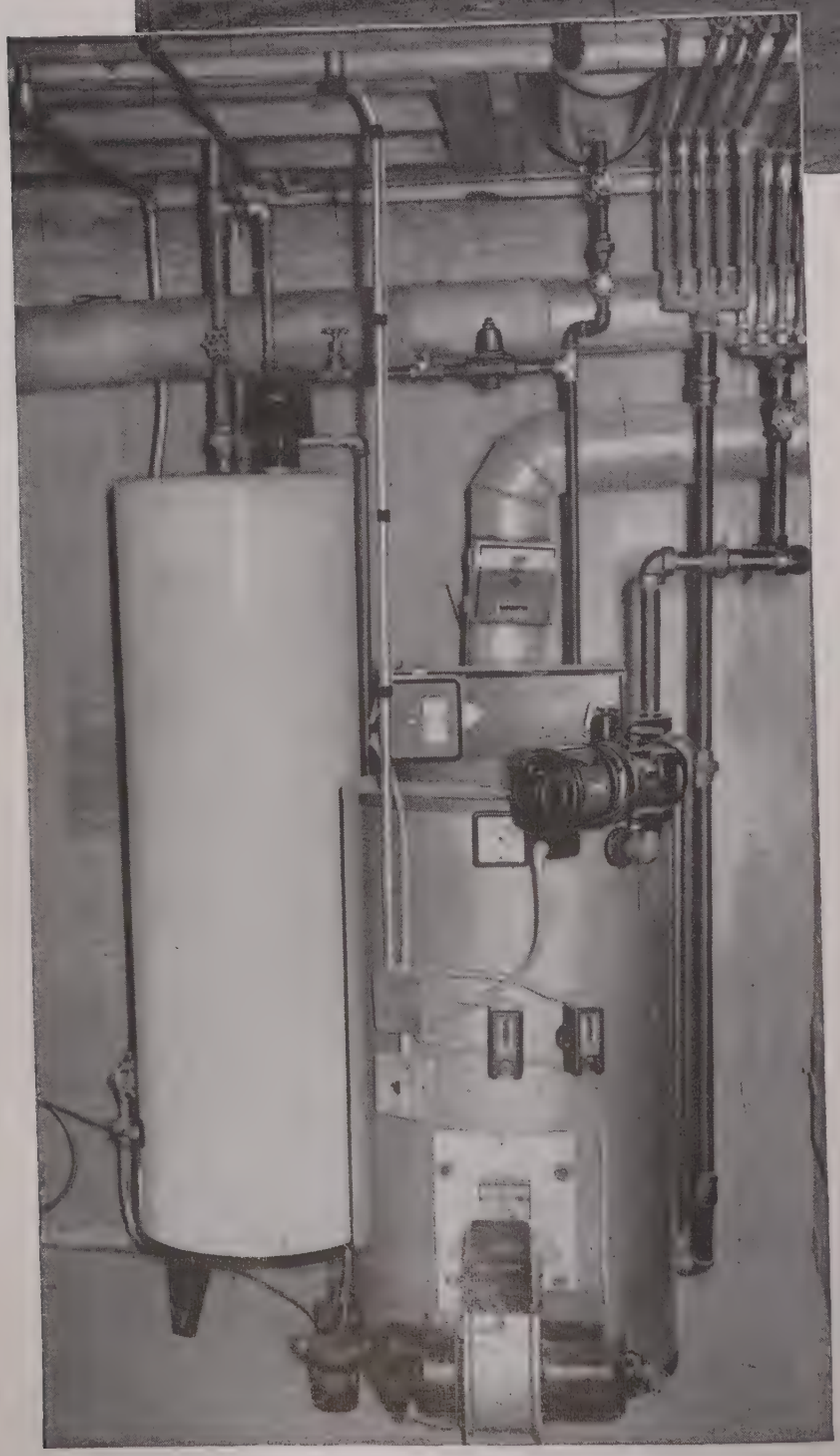
City _____ Zone _____ State _____

Why are so many builders



Typical homes in Hillcrest and Country Gardens housing development, Prospect Heights, Illinois. Approximately 300 homes will be built, equipped with B&G Hydro-Flo Systems.

Builders: **Ehler and Wenborg, Prospect Heights, Illinois**
Architect and Engineer:
Jack Wenborg, Prospect Heights, Illinois
Heating Contractors:
Reliable Heating Company, Park Ridge, Illinois
Plumbing Contractors:
Corra Plumbing Company, Des Plaines, Illinois



The heating plant in Ehler and Wenborg homes takes a minimum of space.

The "sold" sign on your homes is the result of many factors... good architecture... convenience features... known brand appliances ... functional excellence.

You can add to these another sales appeal which lifts your homes out of the commonplace class—gives them a *quality touch* impressive to every prospect. The B&G *Hydro-Flo* System enables you to make a *key selling feature* of equipment you may have previously dismissed with the brief statement, "This is the heating plant." It adds another convincing reason why your homes offer more value for the buyer's money.

Greater comfort and convenience can't be bought at any price, yet the advantages of the B&G *Hydro-Flo* System are within the cost range of the modest home. This system permits you to offer not only the best in heating, but an option of additional benefits, such as summer cooling and snow melting. These features can be built-in originally or added as the owner's budget permits.

The B&G *Hydro-Flo* System is virtually a lifetime installation—no frequent repairs and replacements. That's why *Hydro-Flo* equipped homes command better mortgage terms—greater resale value.

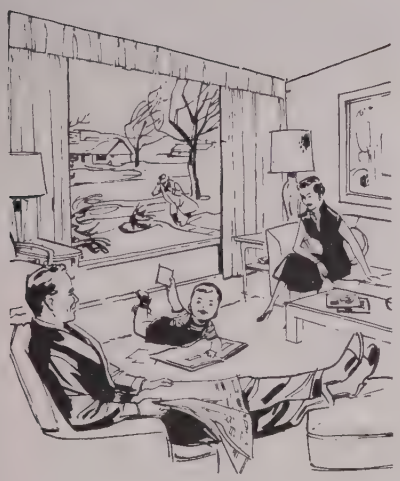
For further information, call your local B&G Representative or write to the factory.

switching to

B & G *Hydro-Flo** SYSTEMS?

...because only water offers the sales appeal of

ALL FIVE



HEATING
Radiant, draftless warmth, controlled to match the weather, produced at low cost.



COOLING
Separately engineered to more accurately answer the differing problems of heating and cooling.



SNOW MELTING
Water in pipes is the only practical method to convey the heat needed to keep sidewalks and drives clear of snow and ice.



B & G BOOSTER
...key unit of the B&G Hydro-Flo System
This electric pump circulates water for heating the house in winter, cooling it in summer and for snow melting panels. The B&G Booster has a solid reputation for *quiet, dependable and long-lived operation...that's why over 2,000,000 units have been sold to date!*



YEAR 'ROUND HOT WATER
The same boiler that heats the house can be used to heat an ample supply of summer-winter hot water for kitchen, laundry and bath.



ZONING
Easy to divide the piping system into zones for better temperature control and fuel economy.

*Reg. U.S. Pat. Off.

BELL & GOSSETT
COMPANY
Dept. EJ-10, Morton Grove, Illinois
Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto, Canada

continued from p. 110

tem, garbage disposal unit, air-conditioning and folding closet doors.

The home will be kept open for public inspection for two months and then, like the six that preceded it, will be sold to the highest bidder. Though profit is not a motive in the school project, the homes of the past have always sold at a profit. The buyer must move the house to his own lot.

Last year's home, comparable in size to this year's, cost approximately $6,000 for plumbing labor and materials not donated. It sold for $7,350.

A bargain? "Sure is," said Reinhold. "You couldn't have duplicated that home for $12,000."



Aristocrat has 1,695 sq. ft. with three bedrooms, two baths, fireplace, family room.

TV show to promote three model houses

NBC-TV's "Home" program will offer three models (see cuts) for its **"House That Home Built"** promotion this year.

NBC expects to authorize 50 builders to put them up—one to a city—has so far approved 36 applications. The models will be opened Sept. 22, coinciding with National Home Week.

Architect **Eldridge Snyder's** plans, prepared with the advice of **NAHB,** call for glass-walled living rooms facing to the rear toward garden and terraces; luminous plastic ceilings to give extra daylight in the kitchen, baths and entry hall; sound-absorbent partitions isolating sleeping rooms. Equipment includes indoor and outdoor barbecues adjacent to the fireplace, recessed and revolving TV installations, built-in Hi-Fi chambers with loudspeakers throughout the house. Plans cost each builder $100. NBC this year will not mention price on the air, thus will not commit builders in advance.



Celebrity model has 1,385 sq. ft. with three bedrooms, two baths, fits on 60′ lot.



Spacesetter split-level has 2,085 sq. ft., five bedrooms, three baths and laundry.

Land for one-family houses brings $30,000 an acre in N. Y.

Builder **Jack Parker** of New York City is putting single-family houses on $30,000-an-acre land.

It is precisely because land costs so much that the single-family, detached home is almost a thing of the past in teeming New York City (where population densities run as high as 436 persons per acre).

Parker paid the stiff price for the 100-acre Bayside Golf Course at the eastern edge of the city. He plans to build a $20 million tract of 600 homes selling from $21,000 to $28,000.

It will be the largest private residential community in the Borough of Queens in nearly 20 years. To keep the price under $30,000 ("glamor for the middle income group," Parker calls it), **Bayside Country Club Homes** will have to be squeezed in six to the acre, which means 40′ to 60′ lots. To offset postage-stamp lots, Parker is retaining the golf course club house, adding a swimming pool, keeping these recreational facilities running as a private club for subdivision residents only.

Parker, former president of **Empire Park Square Lumber Co.,** hired Land Planner **Leo Novick** to get rid of the gridiron street pattern originally plotted for the tract during the twenties so the subdivision can "hold to every roll we have in the land." He admits that one big reason he decided on single-family development for such expensive land is because of the "very bad situation with FHA multi-family building"—the reaction to 1954's Sec. 608 windfall scandals.

Architect: **Oscar Silverstone.** Realtors: **Kern Realty Co.**

Public shunning traditional design, realty editors find

Traditional house design is losing public favor, says the **Natl. Assn. of Real Estate Editors.**

Home buyers have switched heavily to ranch and contemporary models with low, wide lines, the association reports after a survey of its members.

Some cities are bucking the trend, among them Tulsa, Okla., where only 11% of all homes were ranch or conventional, Chicago, 55%; Grand Rapids, 55%; San Diego, 50% and Fort Worth, 60%.

In every other major city on NAREE's list, ranch and contemporary homes account for 75 to 96% of all new homes being built.

Split-levels are holding their own, but are only a fraction of output in most cities.

Supersale: Chicago Builder Norman Winston sells 423 homes ($23,000 up) on rainy week end

A unique psychological buildup helped a Chicago builder, **Winston Park Corp.,** sell 423 homes priced from $23,600 to $29,900 over a notably cold and rainy April week end.

The six month buildup was so successful that 500 persons gathered in the cold predawn hours, waited in line to put a deposit on one of the homes that will require down payments from $3,800 to $7,400.

Winston Park started its campaign last September after it sold out its first 300 home section of Winston Park, northwest of Chicago, in one day. The firm **(Norman K. Winston,** president; **David Muss,** vice president) was left with a waiting list of 1,874 families who wanted to buy in the second section of 600 homes.

To hold these potential buyers six months until the next section opened, General Manager **Robert Richards:**

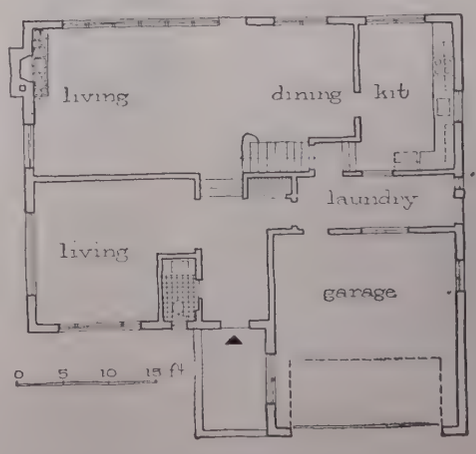
- Sent each family a monthly newsletter giving a progress report.
- Gained extra attention by announcing (in full page newspaper ads) that he would sell all 600 homes in one week end.
- Put a packet of home buying materials and information in the final newsletter.
- Telegraphed a reminder to each family on the list the day before sales were to begin.

First to plunk down his $100 deposit was Lawrence Sommers, 30, a high school teacher. He had arrived at Winston Park's sales tent at 4:30 p.m. the previous day, waited all night with his wife, keeping warm by a kerosene stove. Said he: "I've looked at all the houses in the Chicago area. To get any house similar to those in Winston Park you'd have to pay $10,000 more." Another buyer commented: "It's not hard to see why we'd wait so long for these houses. These are the best."

The Winston Park homes, designed by Architects **Edwin Gerber** and **A. Pancani,** are trilevel brick and wood models with three bedrooms, two baths and a recreation room, built-in kitchen equipment and built-in radio with speakers in every room. Financing: VA or conventional, with **Oak Park Federal S&L.**



Crowd lines up to see Winston Park's $29,900 model. Reversed first floor plan below.



PRICED FOR BUILDERS

SUBURBAN FURNACES



heating and cooling equipment for builders



Low First Cost: We assure you the price is *right.*

Easy To Install: Completely factory assembled and wired, including burners and controls. The built-in draft diverter cuts installation time. No more on-the-job assembly problems.

Flexible in Application: Compact design and close-clearance approval permit installation in any closet, alcove, utility room, attached garage or basement.

Service-Free Operation: Dependable Bryant diaphragm valve and 2H pilot, cast iron drilled port burners are standard equipment. Front-of-the-unit accessibility to all controls.

...AND TO HELP YOU SELL YOUR HOMES

—a broad range of hard-hitting promotion materials. These enable you to give star billing to the Bryant name and the finest in heating and cooling equipment. They talk product advantages while they tell the story of *your* homes. They are tailored exactly to your needs whether for use in a model home or in advertising to draw prospects.



JOB-SITE SIGNS



PERSONALIZED BROCHURES



DIRECT MAIL



PUBLICITY PROGRAMS



LOCAL ADS

—as well as room cards, handout literature and furnace display cards. All these items are available to you through your Bryant Distributor. If you wish, he will assist in preparing your complete program.

BRYANT *UPFLOW* SUBURBAN MODEL 385

Designed for overhead ducts in one-floor, basementless homes. Same sizes and features as the Bryant Downflow Furnace Suburban MODEL 384.

For complete information on products or promotion materials for builders, call your Bryant Distributor or write: Bryant, 48 Monument Circle, Indianapolis 4, Indiana.



LONG LENGTHS are assembled on the ground, lowered into trench, and tapped into position to make a root-proof, watertight joint. Easy to handle, quickly installed. Only Perma-Line is available in 5, 8, *and* 10-foot lengths.

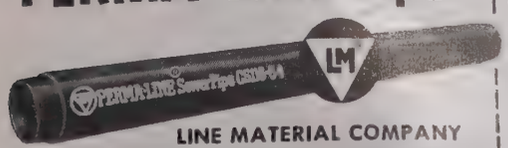
L-o-n-g lengths make PERMA-LINE®
the quickest sewer pipe to install

Perma-Line is the only fibre pipe available in 5, 8, and 10-foot lengths. It goes in fast, resists ground heaving; tapered joints are root-proof and leakproof, and the pipe lasts for a lifetime. It can't rust, shatter, crack, or leak. It's strong, light, tough. In solid pipe for sewers and drains; perforated for field tiling, footings, and septic tank beds. Full line of couplings, fittings, bends, and adapters to connect to soil or sewer pipe. Many uses, in homes, farms, industry.



Write L-M, or mail the coupon.

PERMA-LINE® Pipe



LINE MATERIAL COMPANY
(a McGraw Electric Company Division)

217A

LINE MATERIAL CO. HH-66
Milwaukee 1, Wisconsin

Send full information about Perma-Line Pipe and name of nearest distributor.

Name_____

Company_____

Address_____

City_____ State_____

SEWAGE TREATMENT PLANTS

Sirs:

I am much interested in the sewage plant article (March issue) . . . We are currently engaged in a study of methods to provide additional sewers for rapidly developing areas in Erie County, and in this connection we have many local subdividers who are planning new sewage disposal plants.

We would like some reprints of the article for the engineers in the Erie County Health Department and others who are interested.

CHARLES C. SPENCER, *P.E.*
Engineering Consultant
County of Erie Health Dept.
Buffalo, N.Y.

QUESTIONS

Sirs:

In listing some of the steps to be taken to determine costs of installing community sewerage systems (March issue), the statement is made that for a fee of $200 a local sanitary engineer could determine the size of treatment plant needed and get tentative plans approved by the state board of health.

We seriously question that many engineers will perform this work for only $200 and call your attention, so far as this State is concerned, to the fact that we do not approve tentative plans for construction but require complete contract plans and specifications for sewerage facilities before construction permits are issued. Approval of these detailed plans is required for any type of treatment.

We question the statement that the effluent from the unit described on page 173 "will be pure and no more of a nuisance than rain water."

Aside from these questions, we are in complete agreement with the basic tone of the article.

GEORGE L. HALL, *Chief*
Div. of Sanitary Engineering
State of Maryland
Department of Health
Baltimore

●*$200 is an initial exploratory fee. For that amount, some engineers will give a builder a general idea of the size of plant needed and its cost. In some states, the state Board of Health will give its advice on such a plan.*

Manufacturer of unit described on page 173 says tests show that the effluent run through a small sand filter has a biochemical oxygen demand of only 1.8 parts per million. Average ground water has a B.O.D. of 5 to 7 ppm.—ED.

WATER PLANT FINANCING?

Sirs:

Your article on sewage treatment plants (March issue) was very useful.

Why not do one for water for small projects similar to the sewage ideas?

ELMER LUEHR
West Palm Beach, Fla.

House & Home

June 1956
Vol. IX, No. 6

Published by TIME Incorporated

EDITOR-IN-CHIEF Henry R. Luce
PRESIDENT Roy E. Larsen

EDITOR & PUBLISHER
P. I. Prentice
MANAGING EDITOR
Robert W. Chasteney Jr.
EXECUTIVE EDITOR
Carl Norcross
ART DIRECTOR Adrian Taylor
ARCHITECTURAL EDITOR Peter Blake
NEWS EDITOR Gurney Breckenfeld
ASSOCIATES
James P. Gallagher, Mary McGee,
Robert W. Murray Jr., Richard W. O'Neil
Richard Saunders (Washington)
John Senning, Arthur Watkins, Jan V. White
ASSISTANTS
Peggy Bushong, Natalie Forsberg,
Alice O'Connor, Kathryn Morgan-Ryan,
Olive F. Taylor, Ruth M. Hoagland
CONSULTANTS
Miles L. Colean, FAIA, Ruth Goodhue
James T. Lendrum, AIA, David C. Slipher
PRODUCTION MANAGER
Lawrence W. Mester
CIRCULATION MANAGER
William L. Taylor
BUSINESS MANAGER
Archibald Peabody Jr.
MARKET RESEARCH DIRECTOR
Arthur S. Goldman
ADVERTISING DIRECTOR
Richard N. Jones

HOUSE & HOME is published monthly by TIME INC. Time & Life Building, 9 Rockefeller Plaza, New York 20, N. Y. Yearly subscription payable in advance. To individual or firms (and their employes) engaged in building—design, construction, finance, realty; material distribution, production or manufacture; government agencies and supervisory employes; teachers and students of architecture and trade associations connected with the building industry; advertisers and publishers: U.S.A., Possessions, Canada, $6.00; elsewhere, $9.50. Single copies, if available, $1. All copies mailed flat. Please address all subscription correspondence to HOUSE & HOME, 9 Rockefeller Plaza, New York 20, N. Y. When ordering change of address, please name the magazine and furnish an address label from a recent wrapper, or state exactly how the magazine is addressed. Both the old and the new address are required. Allow four weeks for the change. © 1956 by TIME INC. All rights reserved under international and Pan American copyright conventions.
TIME INC. also publishes TIME, LIFE, FORTUNE, SPORTS ILLUSTRATED and ARCHITECTURAL FORUM, Chairman, Maurice T. Moore; President, Roy E. Larsen; Executive Vice President for Publishing, Howard Black; Executive Vice President and Treasurer, Charles L. Stillman; Vice President and Secretary, D. W. Brumbaugh; Vice Presidents, Bernard Barnes, Allen Grover, Andrew Heiskell, C. D. Jackson, J. Edward King, James A. Linen, Ralph D. Paine Jr., P. I. Prentice; Comptroller and Assistant Secretary, Arnold W. Carlson.

STORY OF THE MONTH
124 *Are coordinated components the site builder's answer to prefabrication?*

NEW HOUSES
174 *Three experimental houses show you new ways to use metals*
137 *57 houses for '57—Announcing H&H's "Hall of Fame" competition*

DESIGN
141 *AIA judges choose the best 23 houses in the West*
138 *Women's Housing Congress: Did they know what they wanted?*

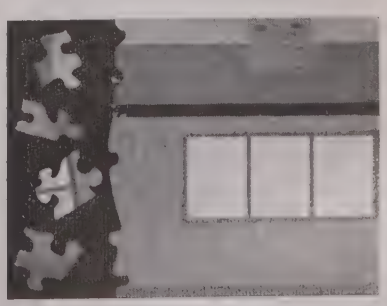
ROUND TABLE REPORT
154 *Steps that will start mechanization of materials handling*

PROFILE
157 *How a young builder grew from two houses in 1953 to 60 in 1955*

PRODUCTS AND PRACTICE
166 *On the way: New uses for metals in tomorrow's house*
162 *Now you can buy a sewerless toilet*
183 *Three makers offer you home building's most wanted tool*
198 *Other new products*

NEWS
Is the GI house market nearing exhaustion?
Mortgage market: Don't look for easier money before August
37 *Index to these and other News reports*

DEPARTMENTS
120 *Letters*
194 *Technical News*
274 *Technical Publications*
298 *Advertising Index*



Cover design by Natalie Forsberg

COORDINATED COMPONENTS

Are they the on-site builder's answer to prefabrication?

Yes, *says the NAHB Small Builders Committee*

The less pieces we have to handle at the site the better. I hope the day will come when we won't have to use a saw on the job. The best way to save on-site labor is to have the size of all our components coordinated to fit together right.

I wish more prefabricators would sell us separate components in coordinated sizes. They could tap a whole new market among builders who are not ready to buy the whole house prefabricated.

Ernest Zerble, *Chairman*

Yes, *says the Lumber Dealers' Research Council*

Coordination is the whole idea behind our Lu-Re-Co panels and the reason for their success. They are all presized to fit together with a minimum of on-site labor and a thousand Lu-Re-Co dealers can tell you they are cutting costs for thousands of builders.

Clarence Thompson, *Chairman*

Yes, *they say at FHA*

A prefab house is essentially an assembly of coordinated components made in the same factory. Once the local builders accept coordinated dimensions they can get coordinated components from many different sources.

Neil Connor, AIA, *Chief Architect*

Yes, *say the builders' architects*

Coordinated components give the builder the advantage of prefabricated parts that fit together quickly and still leave him free to 1) select his components from many manufacturers and 2) work with his own local architect to develop an imaginative design solution suited to local needs and markets.

Morgan Yost, AIA *Chairman,*
AIA *Home building Committee*

Yes, *says the Small Homes Council*

Builders can no longer afford to put thousands of pieces together on the site. Coordinated components are a system that has proven its economy.

James T. Lendrum, *Director*

Yes, *says the NAHB Research Institute*

Components let the small volume builder take advantage of quantity production in factories where quality can be controlled better. They allow him more flexibility of design if he buys them all as a package from a prefabricator.

Components can be assembled a lot cheaper at the site if their sizes are coordinated.

Theodore Pratt, *Chairman*

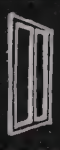
No, *say the prefabricators*

Coordinated components would help the on-site builders match one economy of the prefab house. But the prefab builder would still have the advantage of national advertising, packaged merchandising, packaged financing, packaged design by the very best architects, lower overhead, and lower capital needs. The on-site builders' best answer is to join the prefabricators instead of trying to compete with them.

George Price, *President*
Prefabricated Home Manufacturers Institute

Here are a few of the components that could cut your costs

Components for the outside walls


Framing panels (like Lureco, mostly 4' wide)


Interior drywall (mostly 4' x 8')


Sheathing panels (mostly 4' x 8')


Prehung, preglazed windows (600 sizes)


Prehung doors (mostly 6'8" or 7' x 36")


Exterior finish panels (mostly 32" x 8')


Insulation batts (mostly 15" wide)


Modular brick (mostly 2½" x 4" x 8")


Modular block (8" x 8" x 16")

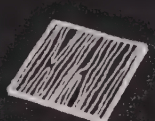

Garage doors (7' x 9', 7' x 16', etc.)

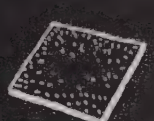

Cellar door assemblies (3 common sizes)

Components for the roof


Trusses (mostly 24', 26', 28' & 32')


Gable ends (same length as trusses)


Plywood sheathing (mostly 4' x 8')


Insulating sheathing (2" x 4" up to 4' x 8')


Skylights (in many sizes)


Compo. shingles (mostly 36" strips)


Prefab. chimneys (in many sizes)

Components for the bath (not all available yet)

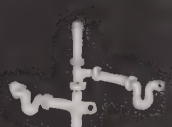

Wall panels (could be 32" x 8'-ceiling high


Ceiling panels (32" x 60" most needed)


Tub enclosures (ceiling high around 5' tub)


Shower stalls (usually 8' x 36" x 36")


Vanities (why are they so low?)


Plumbing assemblies (but will plumbers use them?)


Medicine cabinets (should fit stud spacing)

Components for the wall-to-wall built-in kitchen


Gas ovens (24" wide 24" deep)


Electric ovens (mostly bigger)


Refrigerators (in many odd sizes)


Base cabinets (mostly 24" wide, 32" or 36" high)


Wall cabinets (should be 44" high to reach ceiling)


Dishwashers - sinks (36" high, 48" wide)


Burner plates (12" width module recommended)

Components for the other rooms


Storage walls (mostly 4' wide, 8' high)

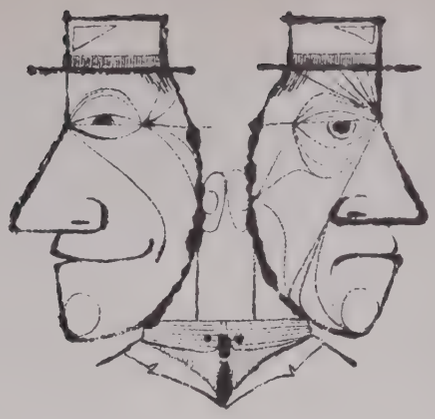

Fireplaces (in various sizes)


Fixed stairs (need standard riser ht.)


Disappearing stairs (height adjustable)


Prehung doors (mostly 24", 30" or 32" wide)

But . . .



Let's get our two heads together when we think about components



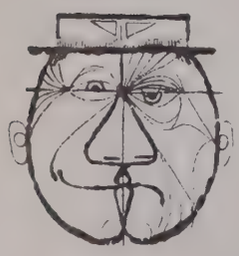
With one head

Almost every builder says he wants components,
so he can build with parts
instead of pieces.
That's another way of saying he knows
components can save him money
by eliminating costly on-site labor.



But what about the other head?

How many builders realize
components could eliminate *twice as much* on site labor
and save *twice as much* money
if they came in coordinated sizes,
so they would all fit together like a prefab house,
without a lot of cutting and piecing on the job?

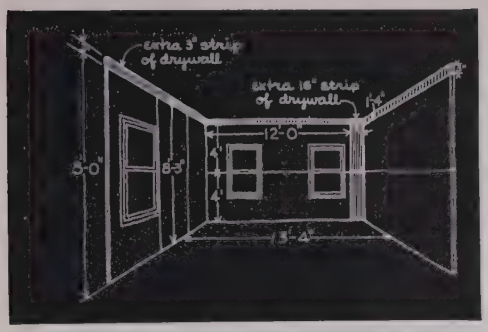


When we put our two heads together

Anyone can see that cutting costs with components
calls for coordinated sizes and dimensions.
And we can't do much about *coordinated* dimensions
until we all agree on a few standard dimensions
to coordinate: a few standard dimensions for components
and, even more important,
a few standard dimensions for the builder's house
in which they will be used.

For example:

Sometimes it's cheaper to size the room to fit your components, as:



WASTE ON DRYWALL

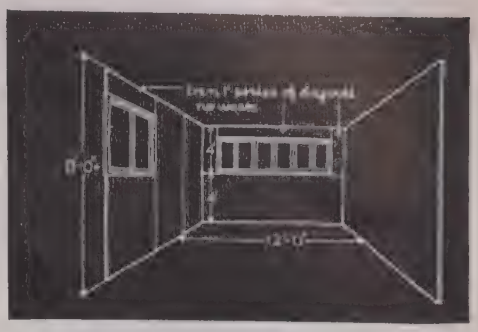
If your ceiling is more than 8′ high you must either stretch 8′ drywall with an extra slice or cut a sizable piece off 10′ drywall.

If your room is 13′4″ wide (commonest width with 14′ joists) your 12′ drywall will need an extra 16″ insert at one end.

Example No. 1

Commonest component of all is a sheet of drywall. With drywall two carpenters need only a day (after framing) to get all walls and ceilings of a seven room house ready for taping and painting, and now you can buy your drywall with a good vapor barrier of aluminum foil built-in at the factory.

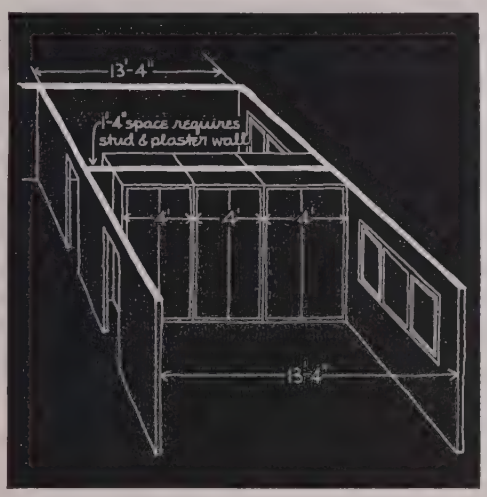
Standard drywall comes dimensioned to even feet—2′ or 4′ wide, mostly 8′, 10′ or 12′ long. You get the maximum drywall savings if you dimension your room to fit the drywall. (With wet plaster it made no difference if your room was an odd size.)



SAVING ON DRYWALL

If your ceiling is 8′ high, you can cover the wall with a single 4 x 8 vertical piece or two 4′ wide pieces laid horizontally,

If your room is 12′ wide, 4 x 12 drywall will span it. If window sill is 4′ above the floor, drywall can run right past it without cutting.



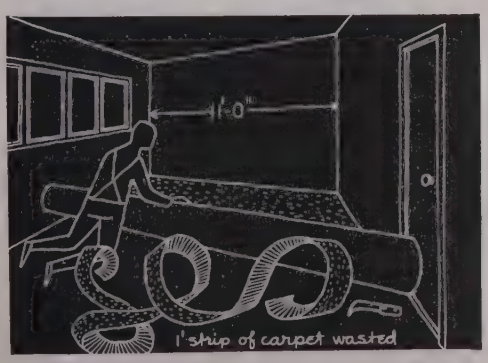
Example No. 2

Storage walls are a component more and more builders want to use. Most of them are 8′ ceiling high; 90% are 4′ wide but you can also buy 2′ and 3′ units.

In a room 12′ wide, you can → often cut your costs by leaving out the partition behind three 4′ storage wall units.

But what happens if your room is 13′4″ wide? Would you ← have to build a stud-and-plaster wall the whole width of the room just to cover the odd dimension?





WASTE OF FLOORING

Too often builders size their rooms to use the full length of 12′ or 14′ joists. That gives them an odd dimension of 11′4″ or 13′4″ that will not fit carpets or any other component.

Example No. 3

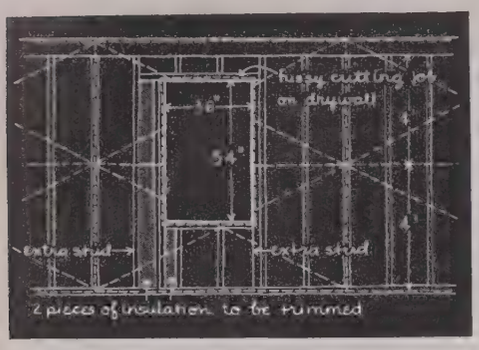
Most carpet is woven 12′ wide. Most linoleum and vinyl flooring is made in rolls 6′ wide. Few rooms are dimensioned to get an economical cut out of any of these better floor coverings. Most rooms waste labor and material cutting off or adding a narrow strip to make them fit.



SAVING ON FLOORING

Maximum economy with better floor coverings comes when one dimension of the room is 12′ so standard width carpet just fits. Second most economical dimension is 9′.

Sometimes it's cheaper to resize the components to fit the room, as:

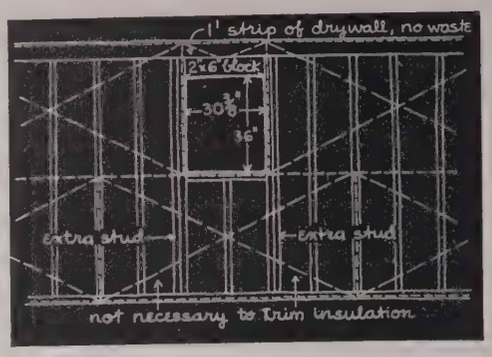


WASTE AROUND THE WINDOW
For example, a 36" x 54" window won't fit. It requires an extra stud and extra cripples; it requires cutting one 8" x 92" strip off a 15" wide insulation bat and two shorter strips 4" wide. It requires notching both drywall and sheathing under the window. It wastes more sheathing and drywall by a bad cut above.

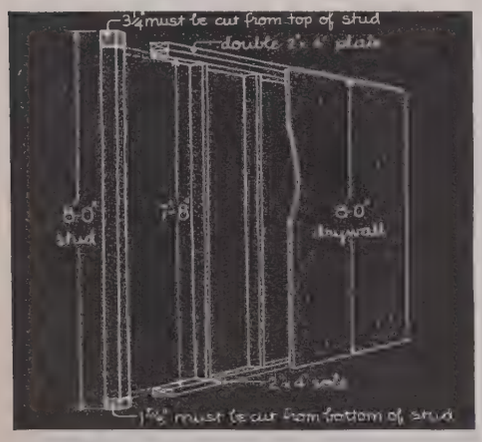
Example No. 4

Windows prehung and preglazed cost a lot less than the same window put together at the site.

But builders could save $100 per house if they could buy these windows sized to fit the wall instead of cutting and patching the wall to fit windows whose sizes are not coordinated with the other wall components.



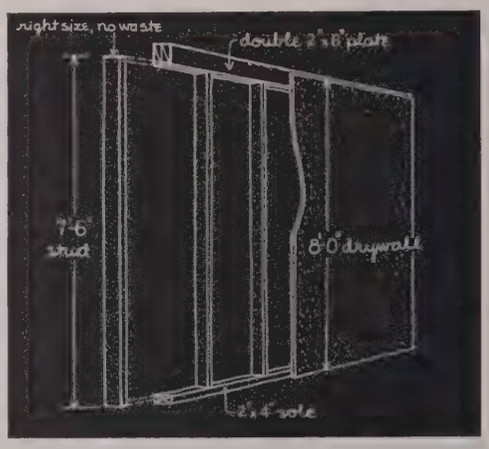
SAVING AROUND THE WINDOW
Look how neatly the window would fit the wall if it were 3' high and 32" wide over-all, including trim (to fit between studs 32" on centers). This window could be made to fit a 32" wide masonry opening, too.



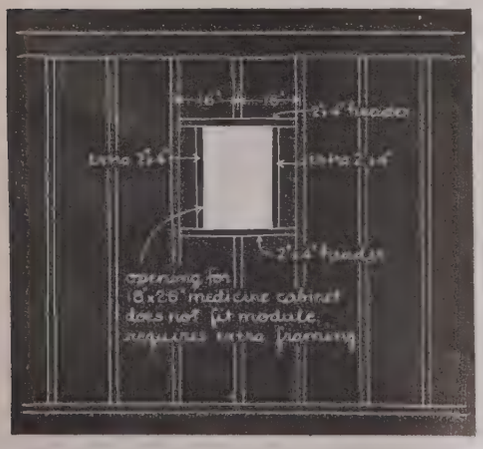
STUD LUMBER WASTE

Example No. 5

Standard length for precut studs is 8'—but you can't use an 8' stud with 8' drywall under an 8' ceiling, because the stud, sole and most of the plate must fit the 8' height of the framing. So carpenters must recut millions of studs. For conventional framing under a double 2" x 4" plate you need studs precut to 7'-8". For framing under double 2" x 6" header developed for Lu-Re-Co you need studs precut to 7'-6" or less and you can use the same length studs and trimmers all around the house.



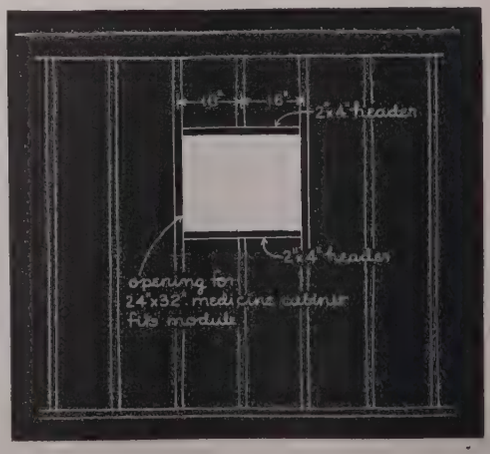
STUD LUMBER ECONOMY



WRONG SIZE
Framing of this too-small cabinet into the wet walls (usually nonbearing) costs almost enough extra to buy a big enough one.

Example No. 6

A good built-in medicine cabinet is a component that can combine sales appeal with money saving, especially if it includes a double electric socket, a good mirror, and a projected low-intensity light source. It should be a lot bigger than yesterday's cabinet, for we use more medicines and toiletries. It is one of many bathroom components whose size is not yet coordinated with the others. Some manufacturers make 22 sizes.



RIGHT SIZE
Easiest (and therefore most economical) size would just fit between studs 32" on center, with a 32"-wide mirror. Height should be 24".

Doors are almost the hardest component to coordinate



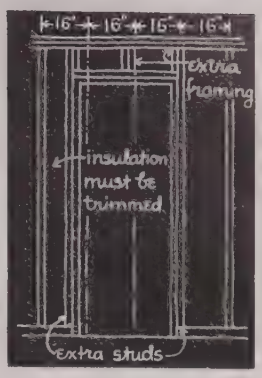
Example No. 7

The prehung door is another fine component. It saves a lot of time and labor assembling the door itself BUT . . .

←

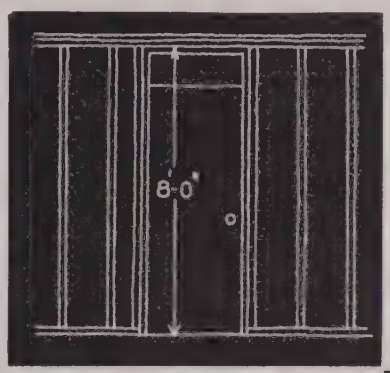
→

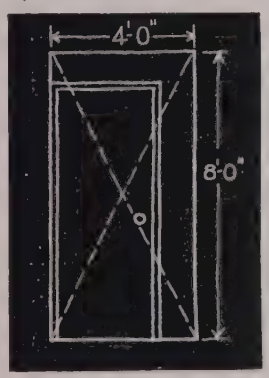
Its usual 6'8" height is 16" too low to reach the ceiling, and its usual 36" width (for outside doors) or 30" or 32" width (for inside doors) is too wide to fit between studs 32" on centers, but too narrow to fill a 48" wide panel. They won't fit the width module of any other component. So all doors—prehung or not—have to be framed into the wall the expensive way with a cripple above an off-module stud (besides the trimmers) alongside.



→

Builders could save the on-site labor cost of this framing if on prehung doors the door framing were coordinated with a standard ceiling height and doors preframed to fit into the wall from floor to plate.



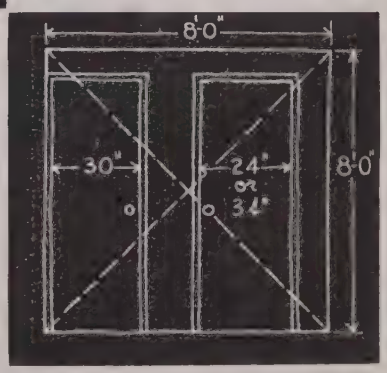


Exterior door panels 4' wide are one of the big money savers in Lu-Re-Co.

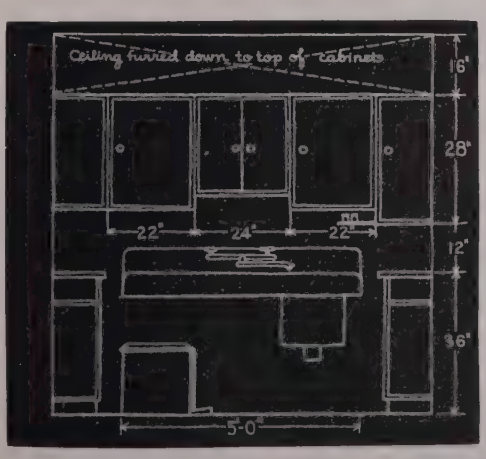
←

→

Because the many doors along the bedroom hall (there are often six or more) usually come in pairs, builders might save still more if they could buy ceiling high panels with two doors preframed into an 8' panel. One smart prefabricator is now developing two-door panels.



The built-in wall-to-wall kitchen calls for new thinking about sizes

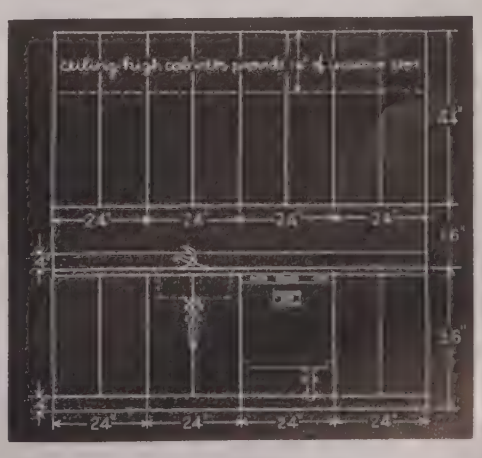


KITCHEN MISFITS

It costs good money to fur the ceiling down to the cabinets instead of carrying the cabinets up to the ceiling for extra occasional storage.

Example No. 8

In a free standing kitchen it makes little difference if cabinets and appliances come in odd sizes. But with built-ins the builder must know, often before he buys his appliances, how big a wall space they will need and where to rough in the plumbing. He can often save the cost of a plaster wall behind if the wall cabinets come ceiling high. And the home buyer also needs standard sizes, for before long he may want to replace a cabinet with an appliance or an out-of-date appliance with a new model.



KITCHEN COORDINATION

The 24" width of all these units lets the builder plan a room where they fit exactly wall-to-wall. 44" high wall cabinets reach ceiling.

For years everybody had been talking about the need of sizing components so they would fit together easily

Trouble was 1) no component manufacturer knew what size to make to fit the house and to fit the other components, and 2) everybody measured a different way, for the industry had no common language of measurement. 3) Site builders allowed such easy tolerances (whereas component users like the prefabricators allow only ½″ tolerance in 40′).

So last spring H&H joined up with the American Standards Association and the Research Institute of NAHB to clear up this confusion. Under the joint sponsorship of ASA, NAHB, and H&H five Round Table conferences* were called to work out the basis for industrywide agreement of room modules and component sizes. Each of these meetings brought together:

1. official representatives of the architects, the builders, the lumber dealers, the prefabricators, mortgage lenders, realtors to tell manufacturers what they wanted, and

2. representative manufacturers to tell these customers what sizes it would be economical for them to coordinate on and what sizes would be too costly.

At each Round Table the first consideration was to translate existing practices into usable working standards wherever possible. All the dimensions recommended conform to the 4″ module.

The unanimous recommendations of these five industry Round Tables have since filled 35 pages of H&H with 23,000 words.

Here, briefly, are the modules the Round Tables recommended to the American Standards Association as a starting point for setting industry standards.

1. For flat ceilings—a standard height of 8′ plus a tolerance (an 8′ wall height under sloping ceilings). (H&H, Apr. '55)

2. For windows—six standard widths to fit the stud spacing and three standard heights—3′ for privacy, 4′ for living rooms, 6′ for glass walls. All these sizes fit the 4″ module. (H&H, June '55)

3. For outside doors—two standard heights—6′8″ and 7′; one standard width —36″. (H&H, June '55)

4. For bathrooms—A 32″ module, with a 16″ half module. This would fit both the stud spacing and the common dimensions of present bathroom fixtures. It would permit standard templates to simplify the rough plumbing and standard prefabricated hard surface panels for walls and ceiling. (H&H, Aug. '55)

5. For kitchens—two new standards: a standard 24″ cabinet width with a 12″ half module; an alternative wall cabinet height of 44″ to reach the standard 8′ ceiling. Only other change proposed in present industry standards was a 24″ base cabinet depth instead of 24½″, to make corners easier where two 24″ cabinets meet. (H&H, Sept. '55)

6. For the other rooms, a 4′ module, with even-foot fractional modules. (H&H, Mar. '56).

Said Frank Cortright, founder of NAHB: "These Round Tables were among the most important home building developments of the year."

** For its part in this program* H&H *received an Editorial Achievement Award from the Associated Business Publications.*

Here, for the first time ever, is a

Directory of coordinated components

Here, and on the next two pages you will find the sizes recommended by the American Standards Association—NAHB—H&H Round Tables for all the major components of the house. *After each item you will find noted whether or not a questionnaire sent to 1,765 manufacturers showed it to be available now.*

Because most of these dimensions are still tentative, this year's directory does not list by name the manufacturers whose products do or do not conform. Next year, however, we hope to include in our directory of coordinated components complete information as to where each can be bought.

Windows

Arrows indicate availability data

	height	width		height	width		height	width	
Wood windows	3′	24″	yes	4′	24″	yes	6′	24″	yes
	3′	32″	yes	4′	32″	yes	6′	32″	yes
	3′	48″	yes	4′	48″	yes	6′	48″	yes
	3′	64″	yes	4′	64″	yes	6′	64″	yes
	3′	80″	yes	4′	80″	yes	6′	80″	yes
	3′	96″	yes	4′	96″	yes	6′	96″	yes
Steel windows	3′	24″	no	4′	24″	no	6′	24″	no
	3′	32″	no	4′	32″	no	6′	32″	no
	3′	48″	yes	4′	48″	no	6′	48″	no
	3′	64″	no	4′	64″	no	6′	64″	no
	3′	80″	no	4′	80″	no	6′	80″	no
	3′	96″	no	4′	96″	yes	6′	96″	no
Aluminum windows	3′	24″	yes	4′	24″	yes	6′	24″	yes
	3′	32″	yes	4′	32″	yes	6′	32″	yes
	3′	48″	yes	4′	48″	yes	6′	48″	yes
	3′	64″	yes	4′	64″	yes	6′	64″	yes
	3′	80″	yes	4′	80″	yes	6′	80″	yes
	3′	96″	yes	4′	96″	yes	6′	96″	yes
Plastic windows	3′	24″	yes	4′	24″	yes	6′	24″	yes
	3′	32″	yes	4′	32″	yes	6′	32″	yes
	3′	48″	yes	4′	48″	yes	6′	48″	yes
	3′	64″	yes	4′	64″	yes	6′	64″	no
	3′	80″	yes	4′	80″	yes	6′	80″	no
	3′	96″	yes	4′	96″	yes	6′	96″	no
Jalousie windows	3′	24″	yes	4′	24″	yes	6′	24″	yes
	3′	32″	yes	4′	32″	yes	6′	32″	yes
	3′	48″	yes	4′	48″	yes	6′	48″	yes
	3′	64″	yes	4′	64″	yes	6′	64″	yes
	3′	80″	yes	4′	80″	yes	6′	80″	yes
	3′	96″	yes	4′	96″	yes	6′	96″	yes
Special bathroom windows	20″	5′	yes						
	30″	5′	yes						

Window heights and widths are rough opening dimensions

Availability of each item indicated in last column

Modular interior doors

	width	height	
Flush doors	24"	8'	yes
	30"	8'	yes
	32"	8'	yes
Panel doors	24"	8'	yes
	30"	8'	yes
	32"	8'	yes
Metal doors	24"	8'	yes
	30"	8'	yes
	32"	8'	yes
Glass doors	24"	8'	yes
	30"	8'	yes
	32"	8'	yes
Sliding doors	24"	8'	yes
	30"	8'	yes
	32"	8'	yes
Complete floor-to-ceiling door units		8' *	yes

* with fixed panel above prehung door

Modular exterior doors

	width	height	
Flush doors	36"	6'8"	yes
	36"	7'	yes
Panel doors	36"	6'8"	yes
	36"	7'	yes
Metal doors	36"	6'8"	yes
	36"	7'	yes
Glass doors	36"	6'8"	yes
	36"	7'	yes
Storm doors	36"	6'8"	yes
	36"	7'	yes
Sliding glass doors	fitting into the 16" modular grid starting with a rough opening width of 96" (minus) and increasing in increments of 48".		yes
Garage doors	9'	7'	yes
	16' or wider	7'	yes
Door units	incorporating structural posts and lintels fitted to the 8' plus-a-tolerance ceiling height.		yes

Miscellaneous

	Depth	Height	
Storage walls	24" at floor	8'0" max.	yes
	28" at floor	8'0" max.	yes
Prefabricated stairways	conforming to 8'0" ceiling		yes
Disappearing stairways	conforming to 8'0" ceiling		yes
Roof trusses 3-in-12 pitch	24' span		yes
	26' span		yes
	28' span		yes
	32' span		yes
Roof trusses 4-in-12 pitch	24' span		yes
	26' span		yes
	28' span		yes
	32' span		yes

Availability of each item indicated in last column

Kitchen components

	width	height	depth	
Wood wall cabinets	12"	44"	13"	yes
	24"	44"	13"	yes
Sloping wood wall cabinets	12"	44"	8-13"	yes
	24"	44"	8-13"	yes
Metal wall cabinets	12"	44"	13"	yes
	24"	44"	13"	yes
Sloping metal wall cabinets	12"	44"	8-13"	no
	24"	44"	8-13"	no
Base cabinets	12 or 24"	36"	24 or 24½"	yes
Sinks	12 or 24" †	36" *	25"	yes
Dishwasher-sink combinations	48"	36" *	25"	yes
Electric ranges	24 or 36"	36"	25"	yes
Gas ranges	24 or 36"	36"	25"	yes
Built-in refrigerators, floor models	12 or 24" †	8' ceiling	24 or 24½"	yes
Built-in refrigerators, wall-hung models	12 or 24" †		24 or 24½"	yes
Automatic dishwashers	24"	36"	25"	yes
Built-in electric ovens	24"		25" max.	yes
Built-in gas ovens	24"		25" max.	yes

* drain 18" high

† module

Bathroom panels and fixtures

	width	height	depth	
Bathtubs	60"	14"	28"	yes
	60"	16"	30"	yes
Wall-hung toilets	3" pipe connection on 8" wet wall			yes
Lavatories	32" max.	34"		yes
Counter-top lavatories	32" max.	34"		yes
Medicine cabinets	32"	24"	*	yes
Prefabricated plumbing walls	16 or 32" †		* *	yes
Wall panels	16"	8'		yes
	32"	8'		yes
Special under-the-window wall panel	5'		32"	yes
	5'		34"	yes
	5'		44"	yes
	5'		46"	yes
Ceiling panels	60"		16"	yes
	60"		32"	yes
Shower stalls	32"	8'	32"	yes
	36"	8'	36"	yes
Bathtub enclosures	5'	80"	32"	yes
	5'	82"	32"	yes

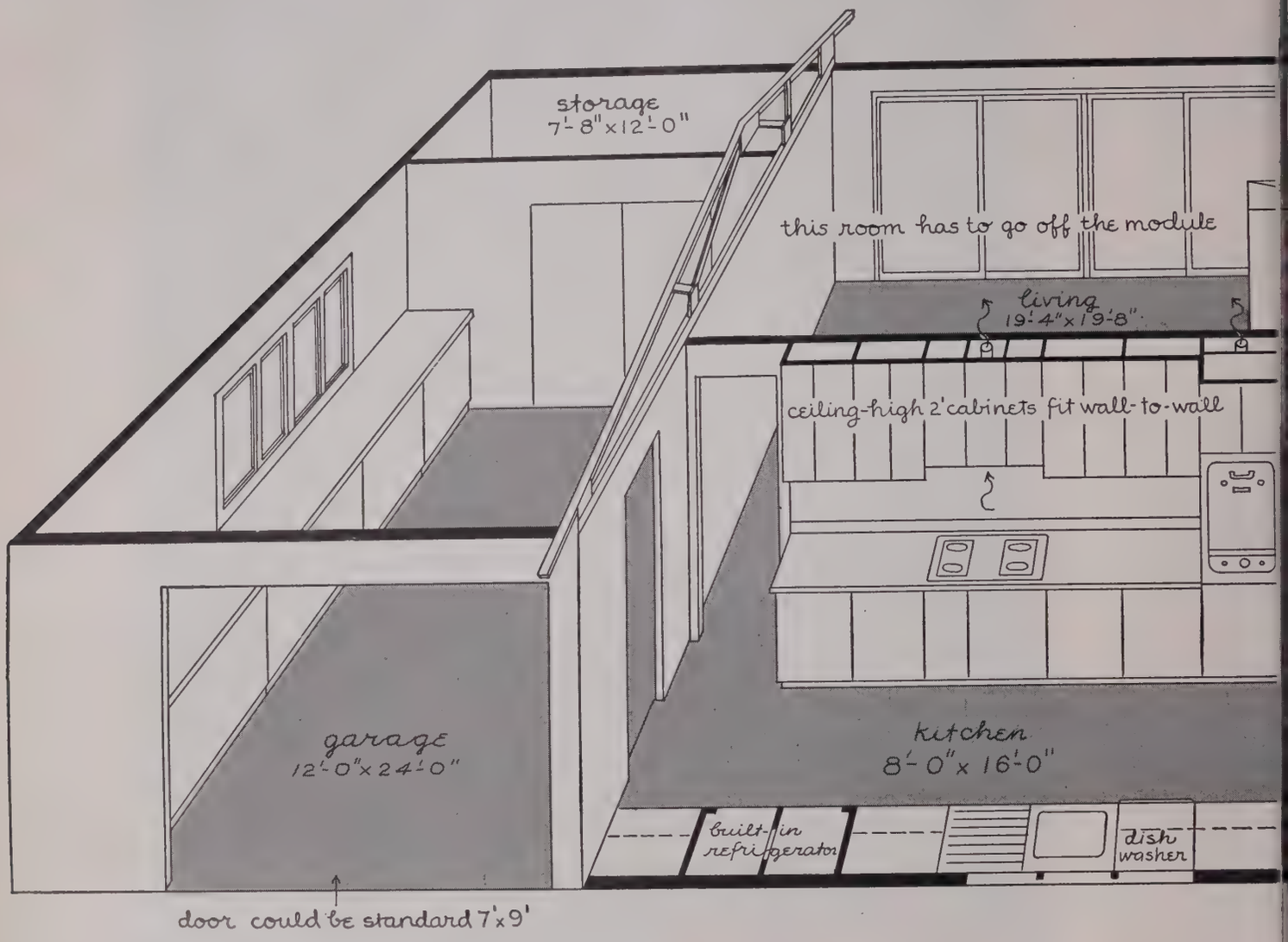
† module * to fit between studs 32" o.c.

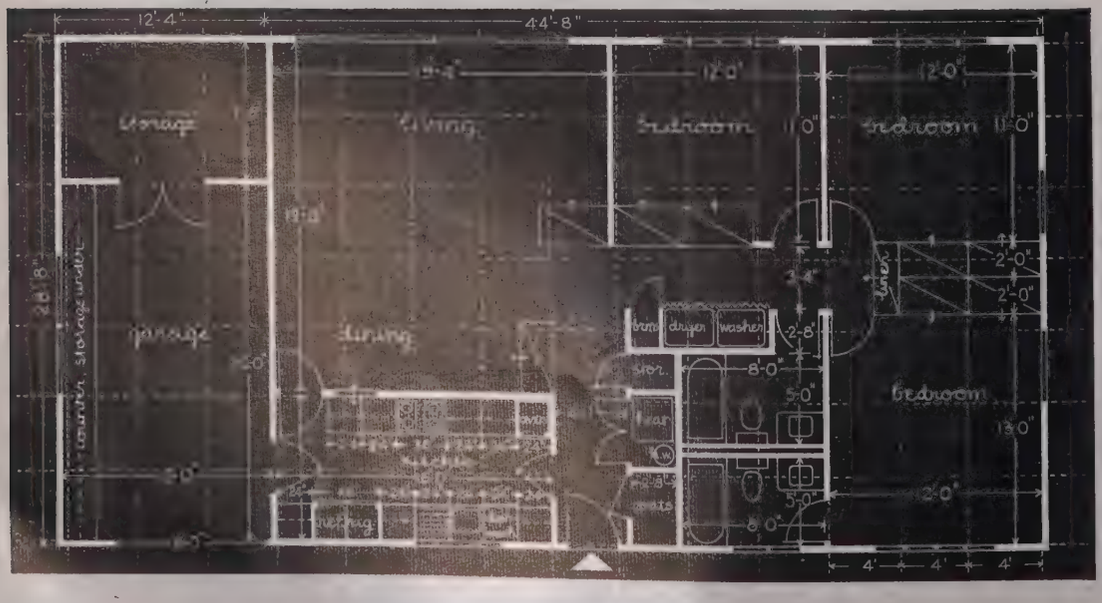
* * must fit 8" wet wall

Miscellaneous

Acoustical tile	12" x 12"	yes
	24" x 24"	yes
Wood flooring	12" x 12"	yes
	24" x 24"	no
Ceramic tile flooring	12" x 12"	yes
	24" x 24"	no
Cork flooring	12" x 12"	yes
	24" x 24"	yes
Rubber flooring	12" x 12"	yes
	24" x 24"	no
Plastic flooring	12" x 12"	yes
	24" x 24"	yes
Asphalt flooring	12" x 12"	yes
	24" x 24"	no

With these coordinated components and coordinated room sizes . . .

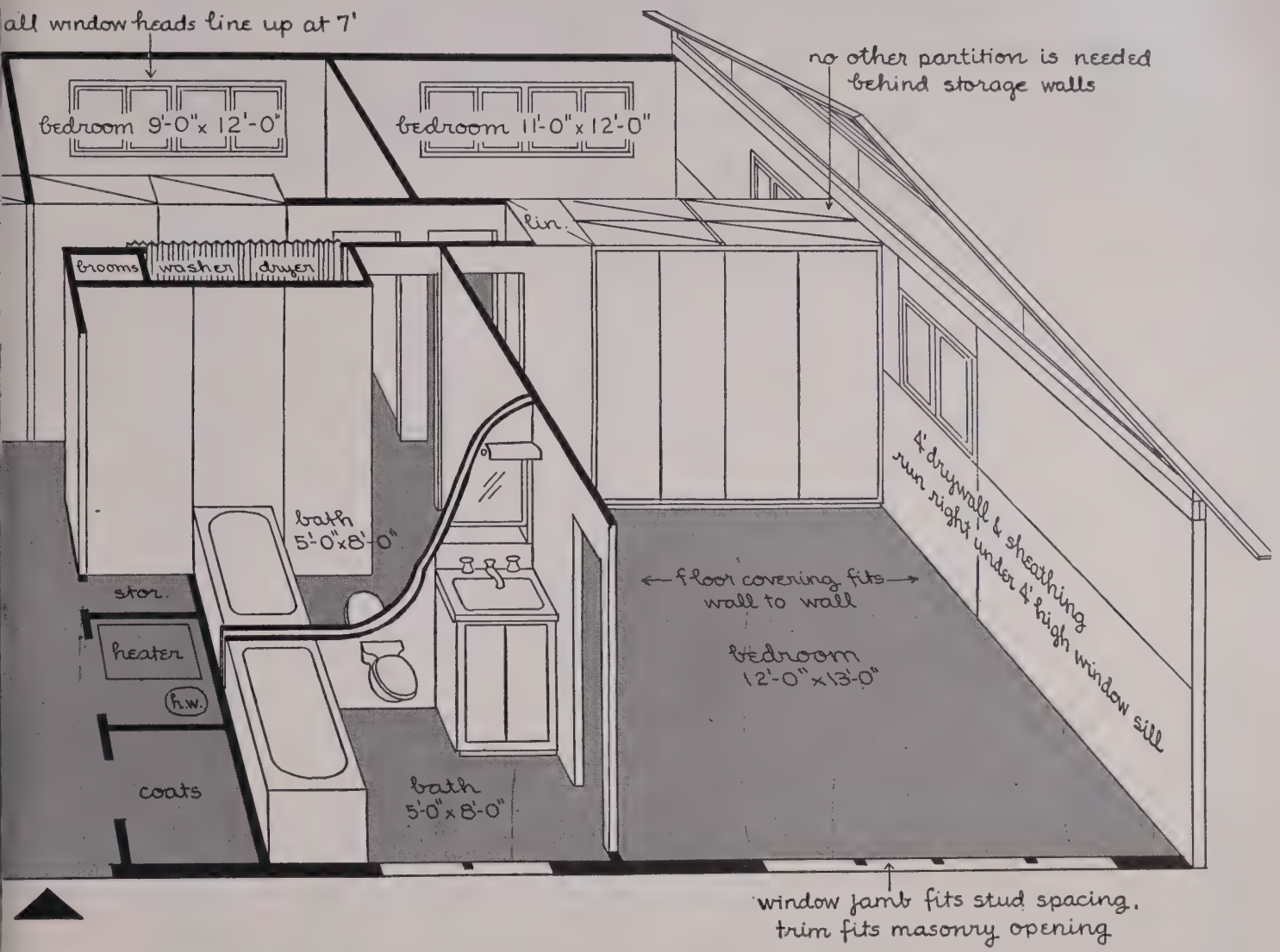




For easy understanding *all rooms on this floor plan are dimensioned from wall to wall, instead of following the recommended ASA practice of including one or more wall thicknesses. Partitions are assumed to be 4" instead of 4⅜" thick, except the 8' wet wall between baths.*

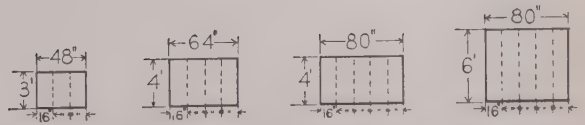
Partition thicknesses always put one room off the even foot module if the house itself is planned on an even foot module of interior measurement. So in this house, whose inside dimensions are 28 x 44', the bedroom hall is 40" wide instead of 48", the living room is 19'4" x 19'8", instead of 20 x 20', the closets off the entry are 34" deep.

this house could go together almost as neatly as a meccano set

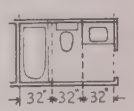


Here are the width modules used:

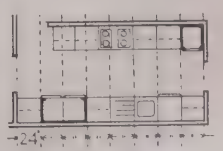
FOR THE WINDOWS—16″ with three heights—3′, 4′ and 6′.....



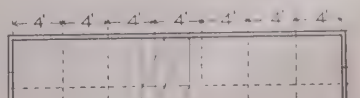
FOR THE BATH—32″. This would fit both fixtures and stud spacing.....



FOR THE BUILT-IN KITCHEN—24″. This would fit almost every appliance except some electric ovens.....



FOR THE OTHER ROOMS—4′. This would require changing few standard dimension except the 9″ of acoustical tile and some floor tile...



Q. How fast are manufacturers adopting these modules for components?

A. Faster than you might expect

Says G. F. Hussey Jr., managing director of the American Standards Association: "The past year has seen a great new interest in standardization among suppliers of the home building industry."

Progress towards standardization has been fastest on window sizes and built-in kitchen components, for exactly opposite reasons:

Windows were in such a costly chaos of odd sizes that anyone could see the need and economy of concentrating on the few sizes architects and builders really need. Without this concentration no window maker can hope to cash in on the big savings offered by automation.

So as soon as the window Round Table recommendations were published the three window associations —wood, steel, and aluminum—began working with the ASA-A62 committee and the NAHB Research Institute. Says Ralph Johnson, NAHB research director: "It looks as if we'll soon have an agreement on even fewer standard sizes than the Round Table proposed."

Meanwhile two manufacturers have stolen a march on their competitors by adopting the Round Table standards independently. These are the F. C. Russell Co., in aluminum (see page 204) and the A. T. Rydell Co., of Minneapolis in wood. Builders who use these sizes should be able to save about $100 a house on the cost of fitting their windows into the wall.

Kitchen built-ins, unlike windows, were already so precisely standardized that the Round Table found only two new standards and a small change in one present industry standard were needed to coordinate wall-to-wall and floor-to-ceiling cabinets; so it will be relatively easy for manufacturers to adopt the Round Table recommendations as they tool up for new models.

Appliance makers have referred the Round Table suggestions to the major appliance division of NEMA in the hope of getting a more official industry standard for all manufacturers to work towards as they bring out new designs.

Meanwhile several appliance and cabinet makers have moved fast independently to put their own new lines on the 24″ width module. Frigidaire gave the lead with its new Holiday kitchen. Now Westinghouse has adopted the 24″ module for its new kitchen units (but its washer will stay 25″ wide). Kelvinator, Servel, Youngstown, and Curtis all say they are moving the same way.

Bathroom standardization has made no visible progress since the bathroom Round Table found that standardization in this most standardized room needed only a few refinements to give builders great savings in the rough plumbing, walls, and ceilings. This is still an outstanding case of so near and yet so far.

The other rooms are up to the architects and builders

As long as they dimension their rooms to save money on joists (one of the cheapest components) almost nothing else will fit. And as long as they allow careless tolerances nothing at all will fit. But if they learn to put components together even half as accurately as the prefabricators and if they dimension their rooms to the 4′ module (recommended by the Round Table) and its even-foot fractions—

They will find that under an 8′ ceiling the present sizes of almost everything except joists, asphalt tiles and doors (see pages 127-129) are coordinated for them.

Is your house one of the best 57 houses for '57?

Are you proud of your houses? Do you feel they are making a significant contribution to housing progress? If so, now is the time to enter them in HOUSE & HOME's annual competition in which the editors will select the 57 houses that make the biggest contribution to housing progress for '57.

- *These 57 houses will all be published in a special Hall of Fame Issue of* HOUSE & HOME *in October.*
- *They will all be exhibited in the National Housing Center, Washington.*
- *From these award winners the National Broadcasting Co. will select the very best houses to feature on national television hook up.*
- *All award winners will be publicized not only in* HOUSE & HOME *but also in your local newspapers.*
- *Architects can enter the houses they design; builders can enter the houses they build; lenders can enter the houses they finance; realtors can enter new houses they sell; lumber dealers can enter the houses they supply materials for.*

Both merchant builder and custom-built houses are eligible. There is no limit to the number of houses you may enter. Entries for each house should include: 1) interior and exterior photographs; 2) floor plans; 3) descriptive data.

While we will accept snapshots (but not renderings), we urge builders to employ the most experienced architectural photographers they can find. Poor or homemade snapshots never do a good house justice. Photographs should not be mounted, but should have your name on the back. You may number photographs on the back and write captions in an accompanying letter or attach a brief explanation to the back of the photo itself. You may include sales data, prices, newspaper clippings and anything helpful that tells more about your houses. Send a land plan too, if you are proud of it.

Deadline is July 15—plenty of time for you to get new houses finished and photographed. Address all entries: Hall of Fame Editor, HOUSE & HOME, 9 Rockefeller Plaza, New York 20, N. Y.

—The Editors



Photos: LIFE—Hank Walker

These women are talking about you



The 103 delegates to the first Women's Congress on Housing had a lot to say about US home building.

- *Some of what they said was wishful.*
- *Some was pure gripe.*
- *Some was misinformation.*
- *But most of what they said made good sense and all of it was earnest and worth listening to—if only to learn how consumers are thinking.*

The congress met in Washington last month at the invitation of HHFA Administrator Albert M. Cole who wanted "to obtain the ideas of American housewives on home planning and design."

For the asking, Cole got plenty of advice (more than HHFA has yet had time to sort out and put into a formal report). He heard a lot about what the women don't like (much of it aimed at the typical builders' house of 1946-50). He learned still more about what they want today. But when the delegates were asked to translate their ideas into a specific $10,000 house, the ladies found themselves in trouble.

This is what housewives dream about

Forgetting all about price, space is the magic word. With more children and more possessions than her mother had, today's housewife must put up with more crowding and more noise. The first thing she wants in her new house is "more space—space for things, space for people, space for escape."

So the delegates asked for plenty of storage—at least 5′ of hanging closet space per person, with extra facilities wherever they can get them.

They want a family area and a quiet area, each well separated from the other.

They want the kitchen at the rear of the house with a window facing the yard. They want a separate utility room so the kids won't track mud through the kitchen.

They want a place for casual meals (but no snack bars), plus other room for formal dining.

They want three bedrooms and at least one and a half baths.

They want to avoid extreme styles. They prefer their house all on one floor, but they'll go to a second story to get the space they need.

Irate delegates to Women's Housing Congress

urged builders of today's house to avoid postwar mistakes like:

stingy storage space
row-on-row, look-alike houses
postage-stamp lots
inadequate wiring
streets without sidewalks
lack of privacy, peace and quiet
tree-stripped lots
traffic-corridor living rooms
gridiron streets
too few bedrooms
cell-like bathrooms
picture windows without pictures





And they want this house not too close to its neighbors, on a lot where the trees have been spared and the sod put in, but without other landscaping.

They can find what they want—at a price

In most parts of the US the delegates could find plenty of houses like the one they described: architect-designed, builder-built—well-planned and handsome—but because of today's soaring land and building costs, rarely priced anywhere near $10,000.

The house the women wanted added up to 1,200 to 1,500 square feet. By the end of the second day of the three-day congress, the $10,000 house was being called "the $10,000 to $15,000 house" and the serious, intent delegates you see here were caught in what several of them called "the straight jacket of designing a specific house for a specific price."

The women themselves felt they had neither the time nor the training to design a house. On top of that, the standard of living of many, if not most, of the hand-picked congresswomen was well above the $10,000 house market. This made it extra hard for them to decide what to put in and what to take out to meet the $10,000 price tag.

Trying to cut costs, one delegate suggested leaving out window screens. (The idea was turned down because "screens are a health essential.") Some delegates thought they might make do for a while without a garage.

Another woman said she could save money by buying the range and refrigerator from a "discount house" instead of having the builder put them in. Still another asked for just the bare essentials at the start: "My husband and I can give each other garbage-grinders and automatic dishwashers for Christ-

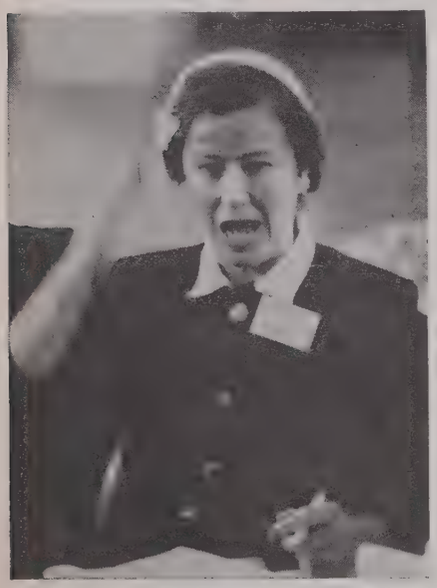
mas and anniversary presents."

Talk about "space vs. gadgets" not only made headlines and revealed misinformation, but sometimes reflected hostility against the builder. Few of the women seemed aware that builders put in much equipment at cost.!

"The trouble is when the builder furnishes the range and refrigerator he is apt to put in some kind we never heard of just because he makes a bigger profit on them," one woman said.

Even though the congresswomen who talked like this are not a fair sample of average home buyers, their remarks show that builders and realtors need to do a better job of merchandising.

They need to feature the top-quality



From militant emphasis . . .

brands they use. They need to show how much home buyers save in installation costs when equipment is built-in at the start. They need to dramatize the advantages of the "package mortgage" ($500 extra equipment costs $3.17 a month on a 20-year, 4½% VA basis).

Market does not agree!

All the talk about equipment was flatly contradicted by the testimony of the market.

Builders were quick to comment on the delegates' cost-saving ideas by pointing out that few buyers ever turn down optional equipment. Stripped down houses are bad sellers and a slow-moving model is often snapped up when built-in kitchen equipment is added (see pages 160-161 for a Midwest builder's experience).

One thing the delegates would not compromise on: adequate wiring. They all agreed the electric service originally installed should be sufficient to accommodate any extra equipment they might get in the future.

The congresswomen had surprising things to say about the bath: they called it "the most neglected room in the modern house."

They asked for bigger, brighter baths with more colored tile, a high sink with shelves on either side and a cabinet below, a wall-hung toilet, a floor with rounded corners for easy cleaning, and a glassed-in shower-tub with a shelf at one end for children's toys.

Here's more that the women had to say . . .

"We all want a family room. Some think it should be part of the kitchen; others want a separate room."

". . . I want to be able to feed the whole family in it—a family living room in the fullest sense . . . space for playing games and watching TV."

"We want a separate dining room, too . . . a formal area with a nice tablecloth to teach the children manners, to bring the family together pleasantly and comfortably."

"If we must have the living and dining room combined, then the dining ell should be planned so you don't always look straight into it."

. . . about the new-fashioned parlor:

"The living room should be the quiet room — a place for 'gracious living': This would be the room for books, music and 'special belongings': It must not be in the traffic ways of daily living and house care."

"I want the living room smaller, formal, for when the minister visits."

"It should be the place where ma and pa can sit and relax or entertain their guests while teen-agers are occupied in the family room."

"Parents are valuable, important people. Fewer would go to our mental wards and divorce courts if they had one room, even a small one, just for themselves . . . peace and quiet without the television and radio."

. . . about bedrooms:

"Large ones are nice, but not necessary."

"Even if you don't need three bedrooms, you must have them for resale."

"Every child should have a bedroom . . . minimal in size but large enough for a bed and storage."

"Children require some privacy. I want movable walls between their bedrooms so that each little room would be almost cell-like, but could be opened up for more play space."

. . . about design:

"With today's big families, you have to build up instead of out, to get the space you need."

"I know this will cost the builder more, but I want a community where every house is different and you have a choice."

"I want my house to express my personality and my neighbor's to express hers."

"Individuality is very desirable if the styles are compatible."

"A two-story house is good when you



. . . to tempered debate

have a growing family. I want a bedroom and bath downstairs for a sick child or an adult with heart trouble."

"I like the split level's division between living and sleeping . . . the split is a good idea since it saves steps."

"I know some people who live in a one-story house and they would welcome the feeling of change you get in a two-story structure. I like going downstairs from bedroom to kitchen. And, by golly, if we're not careful, we'll lose the use of our legs!"

"Instead of calling it contemporary or traditional, why not just say we want good honest design?"

. . . about basements:

"Don't give us those 3′ x 5′ FHA closets! . . . We want a basement."

"A basement is a place where kids can let off steam and relax. I'll sacrifice the formal living room for it."

"We want it for storage, for bad weather play, workshops, roughhousing."

AIA judges choose best 23 houses in the West

Design contest co-sponsored by House & Home and Sunset magazines brings in 325 entries, produces newsworthy winners

On the next 12 pages are the 23 houses a distinguished AIA jury picked as the best in the West.

Under the auspices of the American Institute of Architects, the jury pictured here made awards to "Homes for Better Living" in a regional design contest limited to architect-designed houses built since Jan., 1953, in Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Hawaii. Eight awards were made for custom-built houses; 13 for merchant-built houses; two for land planning.

Robert Cox



The Jury: *(seated, l to r)* Clarence Stein, FAIA; Morgan Yost, FAIA; Joe Haverstick, *president* NAHB; Neil Connor, *chief architect* FHA; Earl Smith, *past president* NAHB; Mary Hamman, *Modern Living Editor,* LIFE *magazine; (standing)* Peter Blake, *architectural editor,* HOUSE & HOME; Charles Goodman, AIA; Pietro Belluschi, FAIA, *Dean School of Architecture,* MIT; Worley Wong, AIA; Perry Prentice, *editor and publisher,* HOUSE & HOME; Paul Groesse; *architect and art director, Metro-Goldwyn-Mayer;* Proctor Mellquist, *editor* Sunset *magazine; Prof.* H. L. Vaughan, *chairman, Dept. of Landscape Design, Univ. of California, Berkeley.*

HOUSE & HOME and *Sunset* magazines were co-sponsors of the competition which was held in cooperation with these 13 national associations:

American Bankers Association
American Society of Landscape Architects
Institute of Life Insurance
Mortgage Bankers Association of America
National Association of Home Builders
National Association of Mutual Savings Banks
National Association of Real Estate Boards
National Retail Lumber Dealers Association
National Savings & Loan League
Prefabricated Home Manufacturers' Institute
Producers' Council, Inc.
US Savings & Loan League
US Chamber of Commerce

With this strong backing, AIA received more than 325 entries—the largest number ever entered in an AIA regional design contest. Builder houses were divided into three price classes and custom houses into three sizes, as indicated on the following pages.

The winning houses and the jury's comments on each deserve careful study. They show what constitutes the best western regional designs of recent months and they point out good design trends for the future.

First Honor Award, Custom House, under 1,600 sq. ft. Architect: Roger Lee; Contractor: Basic Homes Industries, Inc.; Orinda, Calif.

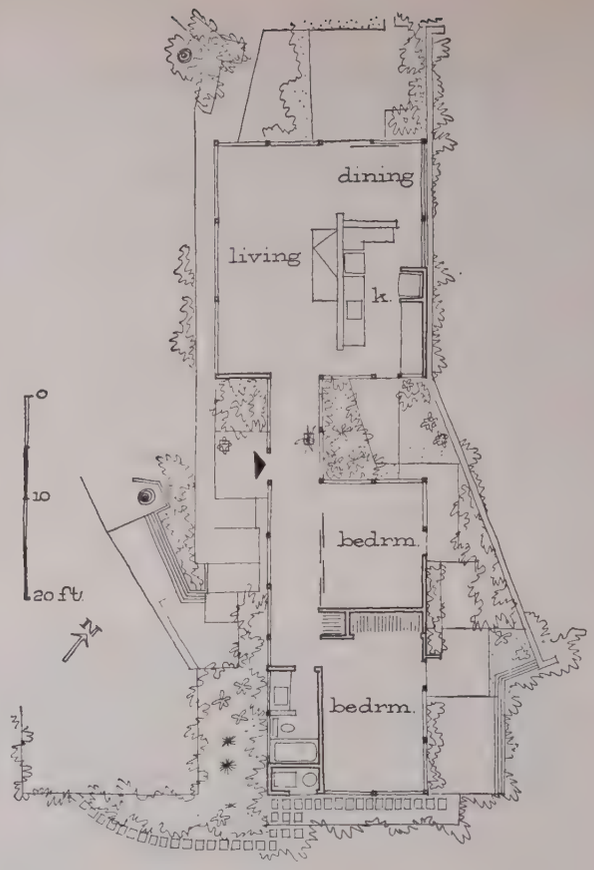
Ernest Braun



Nestling on hillside, this 1,100 sq. ft. house is protected from possible earth slide by 6′ concrete wall covered by redwood fence.

Patio house set on a hillside ledge

Citation: "This two-zone house was picked unanimously for the clarity of its plan, for its elegant and sensitive detailing, for its handling of a difficult hillside site, and for the successful way the architect made his landscape patterns an integral part of the over-all design."



Two-zone plan is entered through a glass link which, in turn, opens onto a charming little patio placed between the two wings of the house.

First Honor Award, Custom House, 1,600 to 2,800 sq. ft.
Architects A. Quincy Jones & Fred Emmons; Contractor Morris Pynoos; West Los Angeles, Calif.

Julius Shulman



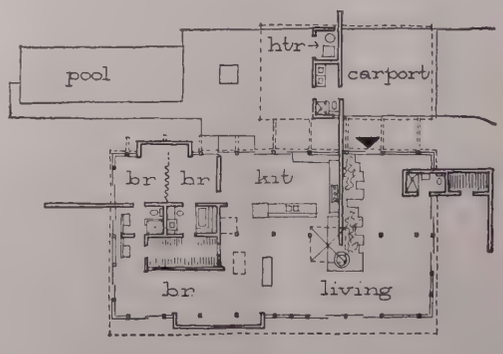
Glass-walled house has vertical eave which shades glass from west sun until 5 p.m. House on 4-acre site has fine view of mountains.



Steel frame (painted red) and metal roof decking are exposed inside house. This is Architect Quincy Jones' own house built last year.

Steel house advances home building

Citation: "This steel and glass house was chosen unanimously because, among all the entries, it seemed to represent the most dramatic technological experiment in residential architecture. There was some question as to whether the strength of the steel framework and decking had been exploited to the full. Some jurors thought that fewer supports and larger spans might have been feasible without any increase in the sizes of the steel sections."



Very open plan is articulated with islands for cooking, eating, relaxation. Landscaping is brought literally into the house.

Award of Merit, Custom House, 1,600 to 2,800 sq. ft.

Architects Jones & Emmons; Landscaping Eckbo, Royston & Williams; Contractor Pat Hamilton; Pacific Palisades, Calif.



Julius Shulman

Fred Emmons' own house is on an heavily wooded 85 x 150′ corner lot. Minimum windows to street, fences, patio walls give privacy.



Half a dozen big and small patios divide this lot into formal and informal outdoor areas, relate beautifully to interior spaces.

House of many patios on corner lot

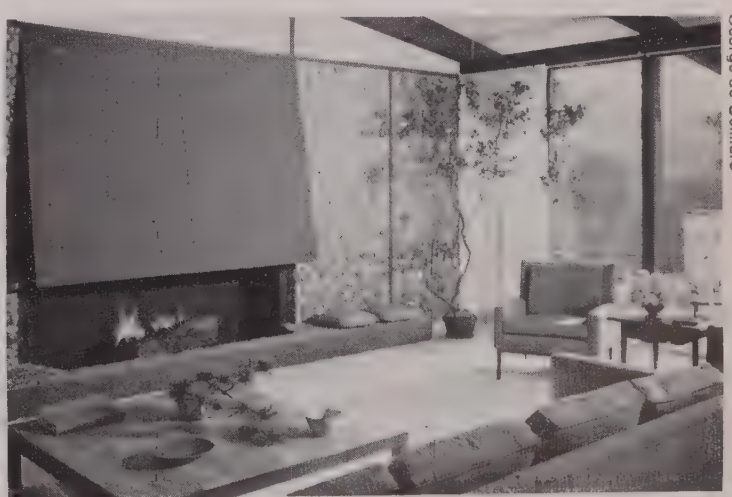
Citation: "This patio house was chosen primarily for its thoughtful plan which shows how much can be done on a relatively small lot to create a series of 'outdoor rooms' for different and specific needs. Some jurors felt that certain details in the execution of the house fell short of the high standard set by the plan and that the photography did not, perhaps, do complete justice to the important qualities of the house."

Award of Merit, Custom House, 1,600 to 2,800 sq. ft.

Architects Dorman & Morganelli; Landscaping Robert Carter; Contractor & Owner Neal C. Lakenan; Los Angeles



Handsome glass-walled house has a 7′ beam module utilizing 4 x 16″ beams tapered to 8″ at eaves; wood posts are 4 x 6″.

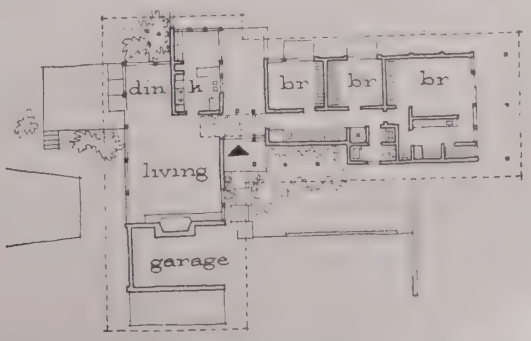


George de Gennaro

Pebbly fireplace wall with sheet steel hood is focus of living area. Interior colors are black, white and beige.

"Japanese pavilion" in two zones

Citation: "A house in the Japanese tradition, with a fine vocabulary of details. The jury was particularly impressed by the detailing of the textured fireplace wall (above, right), and by the simplicity and clarity of the plan. Some jurors felt that a few of the Japanese devices, particularly in the landscaping, were a little overdone."



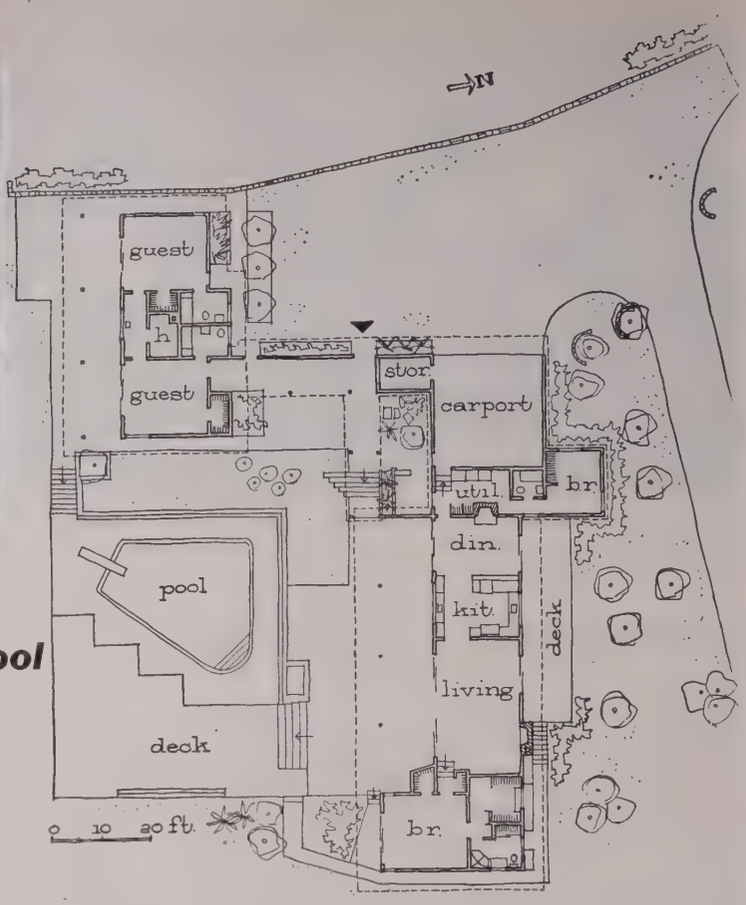
Two-zone plan has entry in connecting link, small patios (one for dining) on either side. Each bedroom has pair of sliding glass doors.

Award of Merit, Custom House, 1,600 to 2,800 sq. ft.
Architects Wurster, Bernardi & Emmons; Landscaping Lawrence Halprin; Contractor Peter O. Mattei; Marin Co., Calif.



Ernest Braun

Big porch with wide overhangs cuts sky glare, makes outdoor living pleasant even on cool, windy days. Swimming pool is at left.

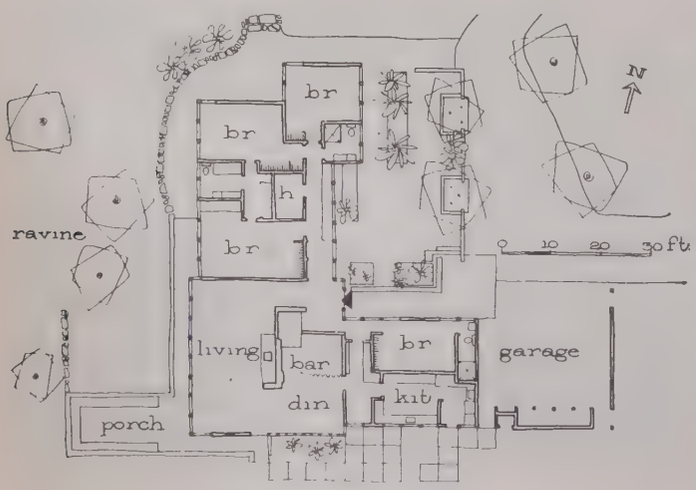


The plan shows two houses: a guest cottage with two bedrooms, main house for owners. Continuous open passages link the two.

Week-end house planned around a pool

Citation: "This L-shaped house was chosen for its sculptural qualities—the excellence of its scale and the elegance of its rather stately proportions. Since the house was designed for a mild climate, some of its planning features (e.g. the open corridors) may not prove applicable to other regions."

Award of Merit, Custom House, over 2,800 sq. ft.
Architects Smith & Williams. Landscaping Eckbo, Royston & Williams; Contractor & Owner Robert Crowell; Pasadena



Julius Shulman



Approach to the L-shaped plan is from a level hilltop. Living room porch projects out over a steep slope and toward the view.

Hilltop house set on edge of ravine

Citation: "This Japanese-influenced house was chosen primarily for the consistency and high quality of its simple detailing, and for the manner in which it adapted an Oriental idea to the requirements of California living. The jury felt that certain elements, particularly the heavy masonry pier supporting the principal roof, were out of keeping with the otherwise successful details."

Award of Merit, Custom House, under 1,600 sq. ft.
Architect George T. Rockrise; Structural Engineer William B. Gilbert; Contractor L. A. Van Wetter; Tahoe City, Calif.



High Sierra house has steep roof designed to direct snow away from major windows, decks and entrances. Interior has 1,425 sq. ft.

Ski lodge for a mountain setting

Citation: "This teepee ski lodge was picked by a majority of the jury (over the opposition of the rest) for the convincing way in which it carried out a single, simple and strong idea, for the pleasant atmosphere created here, and for its deliberately rough detailing—which seemed justifiable in view of the nature of the house and the use to which it was to be put."



Ernest Braun

View down from sleeping balcony shows tall living room and sun-deck which looks across the valley to the south.

Award of Merit, Custom House, over 2,800 sq. ft.
Architect Robert B. Price; Landscaping Lawrence Halprin; Contractor Swen Johnson; Tacoma, Wash.



Dearborn-Massar

House is 35′ above lake, was pushed as close to water as possible to give view from big windows above and for supervision of swimmers.

2-level house fitted on a narrow lot

Citation: "This house was chosen because of the success with which different levels in the garden were turned into useful and interesting outdoor spaces closely related to corresponding areas inside the house. In view of the restrictions placed upon the architect by the narrowness of the lot, by the single view and the difficult grades, the jury felt that the landscaping showed much ingenuity."



Two-level plan has several courts at uphill level (where you enter the house), another patio at the lower level overlooking the lake.

First Honor Award, Merchant Builder, under $15,000
Architects: Anshen & Allen, for builder John C. Mackay & Associates, Palo Alto, Calif.

Mason Weymouth



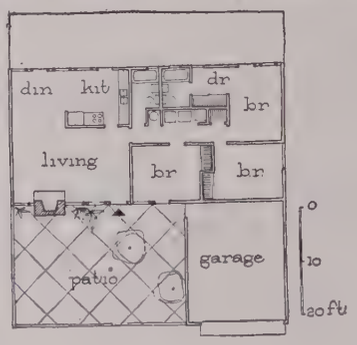
Enclosed patio is between living room and street. Brick fireplace wall has a second, highly useful fireplace/barbecue facing patio.



Living room (looking toward kitchen and dining room) has unusual sense of spaciousness, helped further by glass gable, high ceiling.

Privacy between two patios

Citation: for its unusual use of two patios to create privacy and its skillful use of glass walls and overhangs to integrate indoor and outdoor living areas. The open planning, high ceilings, glass gable-end, and big windows give a feeling of spaciousness to the relatively small living-dining-cooking space.



Plan shows double patios, front and rear. Fences at lot lines give privacy, despite full length windows. Laundry is in hall.

Award of Merit, Merchant Builder, under $15,000
Architects: Anshen & Allen, for builder Elmer Gavello, Sunnyvale, Calif.



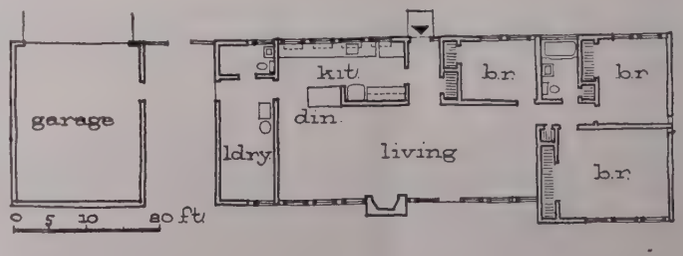
Trees in this old cherry and apricot orchard were saved whenever possible. Wide overhang (on all four sides) makes house seem larger.



Living-dining room is 36′ long, can be divided into two areas by movable case or screen. Big windows usually face south or east.

Small house with big house look

Citation: for a tight plan that gives good circulation with almost no bedroom hall and so permits a living area large for so small a house; for good indoor-outdoor integration; for handsome design under a wide overhang; for saving the trees.



Location of kitchen flanking living room is handy to garage, front door. Traffic crosses living room only at one corner.

First Honor Award, Merchant Builder, under $15,000
Architect: Edward H. Fickett for Builders Volk-McLain, Los Angeles.



Garage entrance like this usually sells well in California. Houses have 1,175 to 1,200 sq. ft., sell for $11,750 to $12,000.

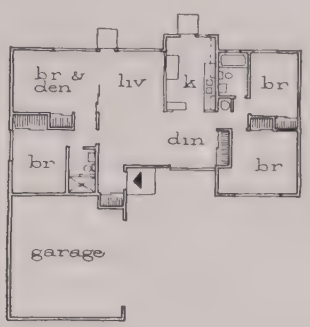


Robert C. Cleveland

Sliding Japanese screen shown above is one of several variations offered buyers in different plans. Large rear windows are standard.

Flexible plan for 2 to 4 bedrooms

Citation: for clean and simple design in front; for pleasant indoor-outdoor relationships in the rear; for a plan that lends itself easily to several different uses of space and permits two, three, or four bedrooms.



Some plans, like this, have three bedrooms, family room, others four bedrooms (sometimes two at each end). All have two baths.

Award of Merit, Merchant Builder, under $15,000
Architects Charles and Arthur Schreiber for Payne Construction Co., Phoenix



Carport has fenced side to street which helps hide unsightly objects. Sun-bouncing white roofs are Phoenix standard.

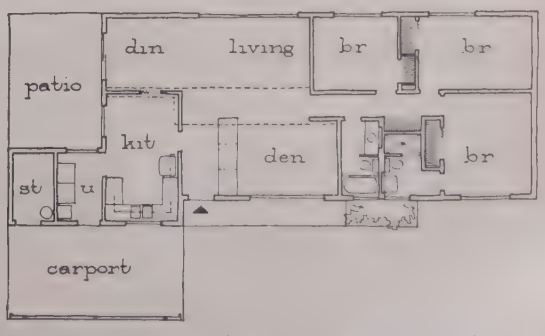


Stuart Wainer

Living and formal dining areas are combined but most meals are in kitchen or in patio adjacent to kitchen. Price: $12,300-14,300.

Phoenix house has front TV room

Citation: for integrating both covered and open outdoor areas with an indoor living area which can be developed as one space or three; for good location of the big kitchen, handy to front door, carport door, or covered terrace; for good use of overhangs.



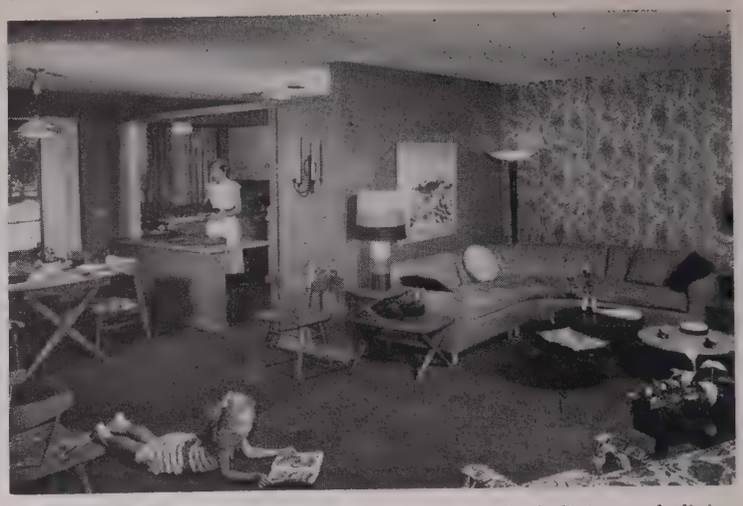
Second living room, marked here as "den," is not in usual family room location but is at front of house, opposite living room.

Award of Merit, Merchant Builder, under $15,000
Architects Charles and Arthur Schreiber for Del Monte Construction Co., Phoenix.

Photos courtesy Popular Homes Magazine



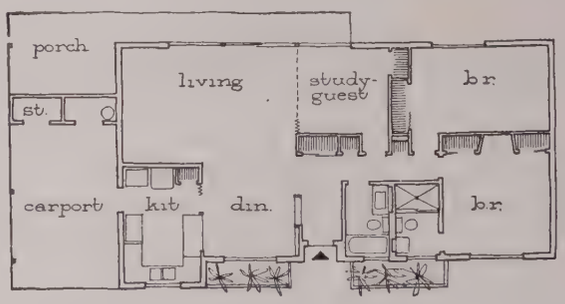
Handsome rear glass wall added to air conditioning problems but helped architects to get away from "typical tract look."



In wide open plan, kitchen can be seen from both living and dining room. House has mechanical air conditioning, is on 80′ to 90′ lot.

Big, air conditioned, for $14,250

Citation: for an open plan that permits full use of space; for good circulation with minimum halls; for good indoor and outdoor integration.



Plan shows third bedroom separated from living room by folding door, salable in 1954 when this house was built but less so now.

Award of Merit, Merchant Builder, under $15,000
Architect: Edward H. Fickett for McDonald Brothers, Los Angeles.

Robert C. Cleveland



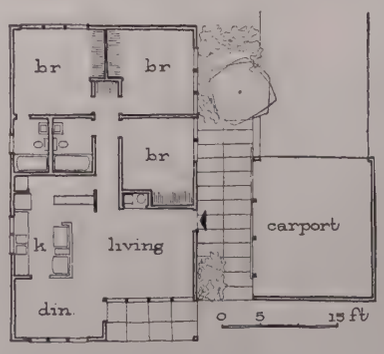
This 1953 design won praise from AIA judges for good plan, good appearance. Big windows are protected by unusually large overhang.



Houses were designed for simple construction so they could be prefabricated in a shop. Glass end faces rear of lot.

House designed to be trucked to site

Citation: for smart and simple design; for an open plan that lets small spaces seem bigger; for good relationship between the big window, the covered porch, and the grounds outside.



Architect's assignment was to design a 1,150 sq. ft. house not deeper than 26′6″, with three bedrooms and two baths.

Award of Merit, Merchant Builder, $15,000 to $20,000
Architects Anshen & Allen for Joseph L. Eichler & Sons, Palo Alto, Calif.



1953 design for famed Joe Eichler has considerable charm. Fenced patio plus paving at rear helps give full use of lot.

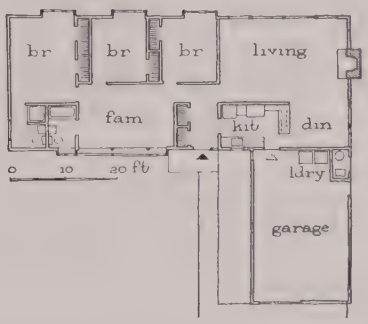


Russell Illig

Eichler trademark is huge window wall with sliding doors to rear patio. Newest Anshen & Allen designs for him are hillside houses.

Spaciousness indoors and out

Citation: for dramatic integration of indoor and outdoor living; for maximum privacy from the street; for a plan that needs no hallways, for good circulation; for a family room especially well suited to children, where they can be watched from the kitchen.



Plan shows all-purpose room separated from kitchen. Anshen did one of first family rooms for Eichler as early as 1950.

Award of Merit, Merchant Builder, $15,000 to $20,000
Architects Smith & Williams for George D. Buccola, Los Angeles.



This is a "Sherwood Forest" model, reported in H&H, February, 1956. Because of double garage and long, low roof, house looks enormous.

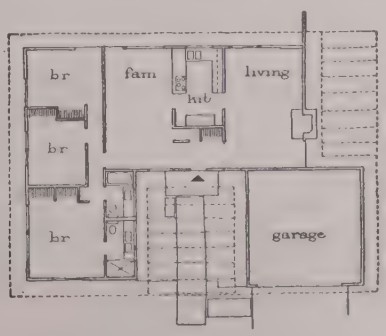


Julius Shulman

Well designed and equipped kitchen is between living room (seen in background) and family room. Living room can be shut off.

Luxuries for less than $20,000

Citation: for clean and handsome design; for an unusual plan centered on the two-way kitchen; for privacy in front and good indoor-outdoor living provision in the rear.



Excellent plan has entrance court with overhead trellis, two-terrace living room, luxury baths, family room away from living area.

First Honor Award, Merchant Builder, over $20,000
Architect George T. Rockrise for Sharp & Robinson, San Francisco

Ernest Braun



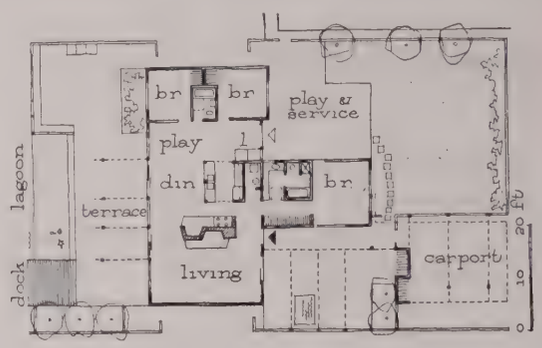
One of a group of waterfront houses on Belvedere Island. Excellent design, fine siting, drew buyers who wanted individuality.



Massive brick wall divides family room-kitchen and living room, has barbecue, built-in stove, decorative copper flues.

Waterfront houses have a fine plan

Citation: for excellent integration of indoor-outdoor living, taking good advantage of the view; for a centrally located kitchen that looks just right in the living area; for a convenient plan that wastes no space.



Master bedroom suite is in wing separated from rest of house. Informal open plan is well adapted to boat-owning families.

Award of Merit, Merchant Builder, over $20,000
Architects A. Quincy Jones and Frederick E. Emmons for Pardee-Phillips Construction Co., Los Angeles

Julius Shulman



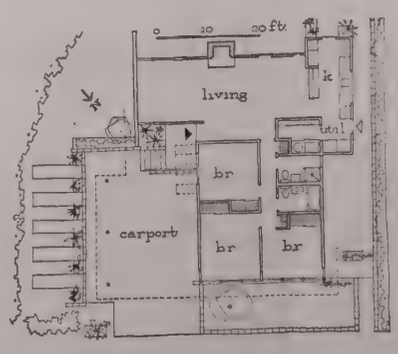
Big roof stretching over lowered carport gives an impressive, spacious entrance. Front block wall creates privacy.



High-ceilinged living room (seen from kitchen) has masonry wall and fireplace at right, is unusually large: 32′ 6″ x 16′.

Slab houses to fit hillside lots

Citation: for a visually exciting solution for a series of shallow sloping sites; for achieving both privacy and openness in front by a narrow patio; for taking full advantage of old planting for pleasant indoor-outdoor living across the rear.



Key to plan is lowered carport, with main entry to house from this location. House has 1,346 sq. ft., sold for $20,000 to $27,000.

First Honor Award, Merchant Builder, over $20,000
Architects Anshen & Allen for Herbert A. Crocker Co., San Francisco.



Design feature is a broad roof extending well over paved terrace. Big house has 3,016 sq. ft., sells for $39,900 on $10,000 lot.

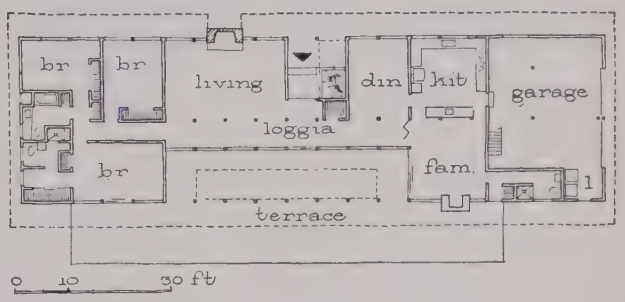


Roger Sturtevant

Handsome terrace (left) and long loggia, with living room at far right, as seen from the all-purpose room. Ceiling is 2" t&g.

Smart design for a narrow lot

Citation: for skillful use of structure as decoration and for unusual integration of indoor and outdoor areas both visually and functionally.



Custom house builders could well consider this plan for a long, narrow lot. Family room off kitchen is separated from living room.

Award of Merit, Merchant Builder, over $20,000
Architects Arthur Janssen, Wm. Daseking, Walter Keller for A. Janssen, Jr., Atherton, Calif. Garden: Thomas Church.



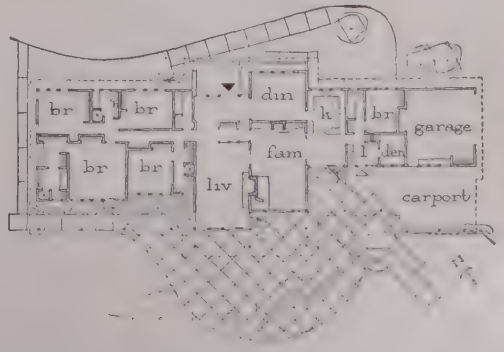
Design problem of how to create an integrated porch is neatly solved here by extending roof, supported by three posts.



Family room, with barbecue and a fireplace, is as large as formal living room. Kitchen and breakfast room are seen at right rear.

Decorative structure indoors and out

Citation: for good integration with a big, well-wooded site; for attractive landscaping; for handsome and functional use of overhangs; for good space planning with halls small for such a big house.

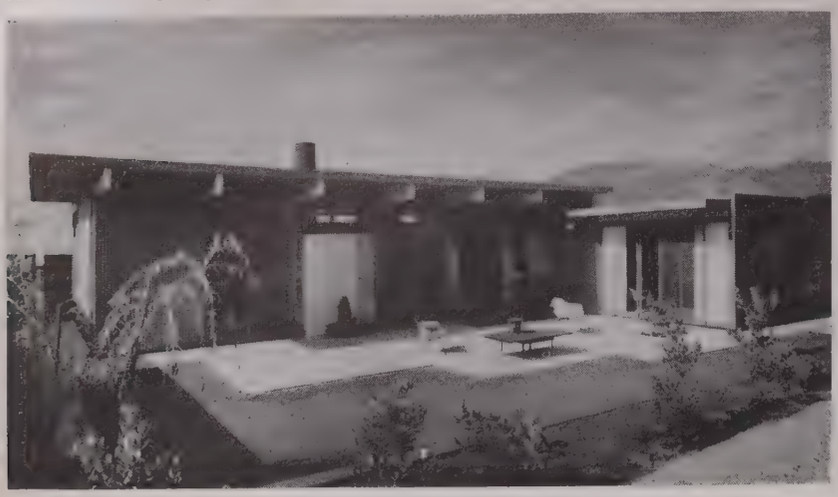


Plan is well suited to big houses which are on one-acre lots, with 48' setback from street, 60' sideline restriction.

Award of Merit, Merchant Builder, over $20,000

Architects A. Quincy Jones and Frederick E. Emmons for Joseph Eichler, Palo Alto, Calif.

Ernest Braun



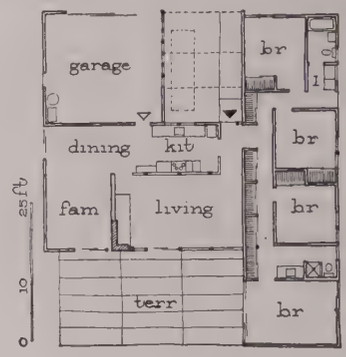
This house has 1,770 sq. ft. plus 419 sq. ft. in garage. Rear patio has sun-trap formed by L of projecting bedroom wing.



Kitchen cabinets have sliding Masonite doors sprayed with various shades of two-tone washable paint.

Four bedrooms and a family room

Citation: for a front patio plan giving immediate access to living room, kitchen, and bedroom hall; for decorative use of structure; for good indoor-outdoor living.



Family room adjoining living room is more popular than family room separated from living area.

Special Award of Merit for land planning

Architects Bassetti & Morse for Builder Theo Caldwell, Seattle, Wash.

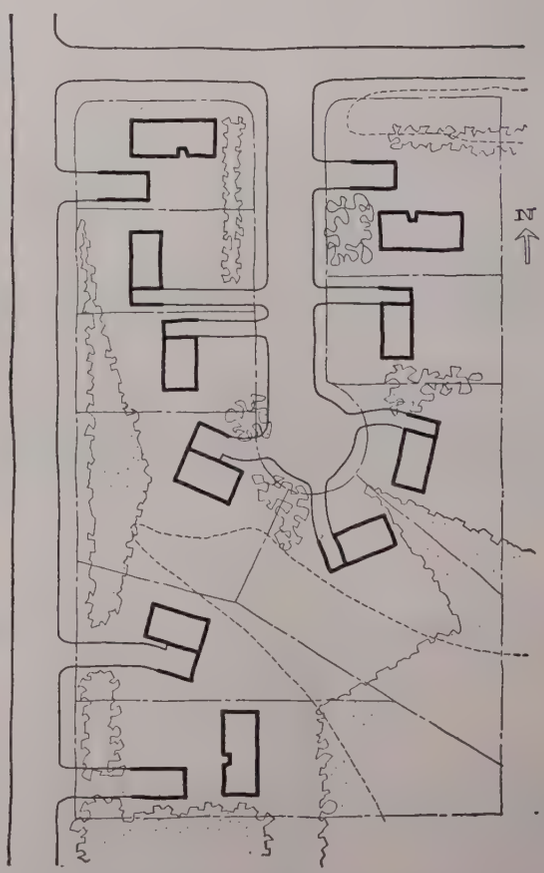
Art Hupy



As both photograph and plan show, houses are staggered on lots for privacy, to save trees and to give better views on all sides.

Big lots, big trees, small houses

Citation: for spacious arrangement of houses in relation to each other and to the fine old existing trees. In this subdivision the planners placed comparatively small houses on unusually large plots.



Street plan shows benefits of cul-de-sac. Careful placing of each house gives greater individuality.

Special Award of Merit for Land Planning

Architect Vernon DeMars, Landscape Architect Lawrence Halprin, for the Barrett Construction Co., Richmond, Calif.



Street pattern eliminates high-speed streets, includes cul-de-sacs where they make sense. Detail of street plan below is white area in large plan.

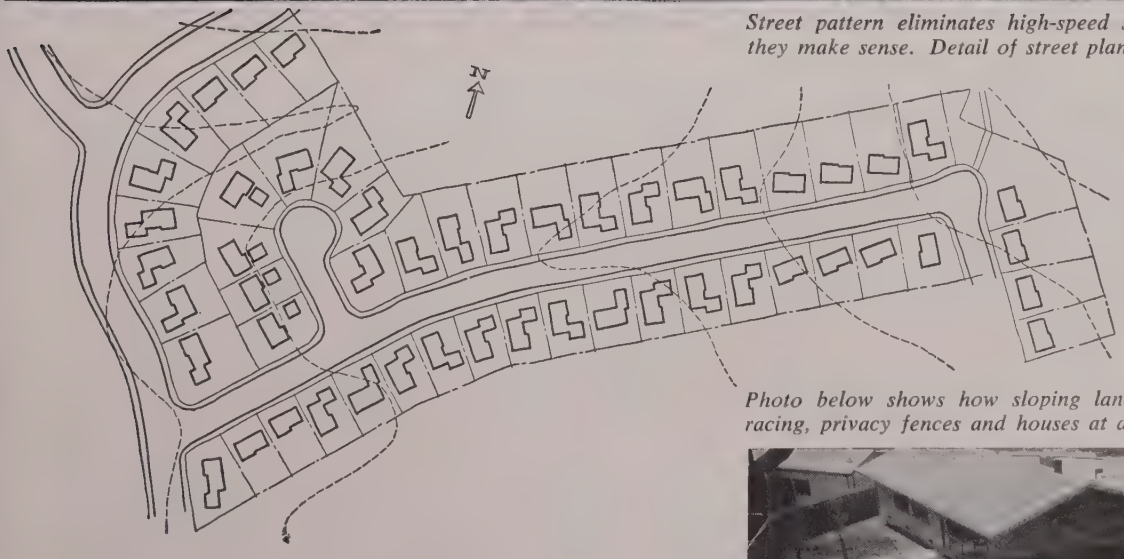


Photo below shows how sloping land was expertly handled with terracing, privacy fences and houses at different levels.



Small lots laid out for big views

Citation: For development of hilly subdivision site. Houses are located so as to open on unbroken, interesting views, (including a park) and at the same time are located to maintain privacy. However, lots are small in relation to size of houses.

ROUND TABLE

Robert H. Johnson



For panel members see p. 188

Here is a follow-up Round Table that has already started important action.

Last Fall a Round Table jointly sponsored by the Lumber Dealers Research Council, the Prefabricated Home Manufacturers Institute, and HOUSE & HOME *found that "mechanized materials handling could cut home building costs at least $1 billion a year."*

This spring this Round Table reconvened with representatives from the railroads and the manufacturers of building products, especially lumber. Purpose of the second meeting: to plan immediate action to change that billion dollar saving from a hope to a reality.

To that end, the Round Table's first recommendations fixed responsibility for the first steps as follows:

Recommendation	Action taken
1. *The National Retail Lumber Dealers Association should questionnaire all its members right away to find out how many are already equipped to handle unit loads and how many more expect to mechanize this year.*	**1.** *The questionnaire is being prepared with expert guidance and will be sent out this month.*
2. *The National Retail Lumber Dealers Association should assume immediate responsibility for educating and persuading its members to order lumber in standard units.* *Good places to sell and explain unit ordering would be its next national convention and all the area meetings.*	**2.** *The NRLDA Convention will feature unit ordering in a big way.*
3. *Before dealers can order their lumber in units we need an industry-wide agreement on the right size for these units. This is a job for the National Retail Lumber Dealers Association and the National Lumber Manufacturers Association, in consultation with the Forest Products Committee of the American Association of Railroads. The Lumber Dealers Research Council and the Timber Engineering Co. should make available the necessary research.*	**3.** *NRLDA promptly set up a top ranking committee to work out answers with a group from NLMA. Chairman is Jay O'Malley, first vice president. Members include three members of the Round Table, John Moeling, Clarence Thompson and V. J. Wardein, plus W. F. Mullin, president of the Southern California RLDA, long chairman of its car loading and materials handling committee, E. R. Titcomb of Cleveland and S. S. Caves of Honeoye Falls, N. Y.*

Here is the unanimous report of the Round Table panel:

Materials handling is mechanizing so fast that lumber mills, yards, and railroads have no time to lose

1. Mechanization has suddenly begun to catch on in a big way in the lumber yards

When this Round Table first met in September we were told that only about 2,500 (10%) of the yards were equipped to handle unit loads. Since then mechanization has so accelerated that before the end of next year twice as many yards may be able to handle unit loads. This would still be only 20% of the yards but that 20% might well account for 80% of the volume.

In the past 12 months, we hear, many yards have begun buying mechanical muscles secondhand. This demand for used lifts suggests that mechanization is reaching down into the smaller yards, which might hesitate to pay $6,500 and often much more for new equipment.

2. More and more building materials are being shipped to the yards in unit loads

Already almost all gypsum products are unitized. About 80% of all asbestos siding and asphalt roofing, most plywood, most sheathing, most insulation board, and most flooring, could be shipped in units if the dealers would order in units and the railroads would provide the right cars to carry them. About 35% of the brick yards are now ready to ship palletized brick and now even pipe is beginning to come in big unit loads.

The manufacturers' faster trend to unit load shipments is one big reason lumber dealers are stepping up their purchase of fork lifts to handle them. (The other big reason is the education campaign launched by the National Retail Lumber Dealers Association at their expositions in New York and Cleveland to help its members see how mechanical muscles could cut their costs and improve their service.)

3. Rising labor costs will further speed the substitution of fast mechanical muscles

4. Manufacturers report that unit loads save them real money after their first investment

They save real money not only on materials handling and shipping but also on clerical work. In fact, some manufacturers say their principal reason for adopting unit loads was to encourage customers to systematize their purchasing and order in standard units.

5. Unit loads are helping dealers handle materials much cheaper and make up shipments much faster

As more and more products become available in unit loads, we believe lumber yards which do not mechanize will find it harder and harder to compete in either cost or service. In other words, we believe practically all lumber yards will soon have to mechanize if they expect to stay in business and prosper.

6. Mechanized handling should help the local lumberyards increase their sales

A lumber dealer delivering to the builder's foundation just the right quantities loaded in just the right order for erection should be able to earn a reasonable mark-up and still save the builder more money than the builder could save by short-circuiting the local yard.

Incidentally, if the lumber dealer's truck is not the kind of truck he can drive right up to the foundation to make deliveries through mud and over the kind of ground he is apt to find on the builder's lot during construction, the lumber dealer had better buy the kind of truck he needs, even though such a truck may cost him $1,000 more; and a truck equipped with $2,000 scissors lift to deliver roofing on the roof instead of on the ground will be another major help in getting and holding the builder's business.

Lumber yards must learn to order standard units before they can expect mills to spend to unitize

7. Lumber is almost the only building material that is not unitizing fast

(Today plywood is about the only lumber mill product regularly shipped in units.)

8. The lumber mills' delay in switching to unit loads is most unfortunate

Lumber accounts for 60% by volume of all the materials used in a house and more than 60% by volume of all the materials handled by most lumber dealers.

So until lumber is unitized lumber dealers can use their mechanical muscles on less than 40% of the materials they distribute and get less than 40% of the potential benefit of their investment in mechanical handling equipment.

9. Lumber mills will soon face an urgent demand for unit load shipments

More and more lumber yards, prefabricators and industrial users are mechanizing. The lumber mills would be wise to get ready for this demand without delay. Eventually, why not now?

10. Best way to encourage unit shipments is to place unit orders

We cannot expect the lumber mills to unitize their shipments until the lumber dealers change their buying habits, and unitize their orders.

11. Eventually most of us believe unit loading should be cheaper for the lumber mills

It has proven itself cheaper for everyone else, but during the transition period lumber dealers would be smart to encourage the lumber mills to convert faster by sharing with the lumber mills their own saving on unit loads. To that end, we repeat the unanimous recommendation of our previous meeting—that lumber dealers should temporarily agree to pay not more than $2 m.b.f. extra for unit loads. Already some mills are offering unit loads in boxcars at $1.50 m.b.f. extra and encouraging their customers to expect that this surcharge may soon be reduced to $1.

12. Even now, unit loads of construction lumber involving relatively few items should cost the mills less than $2 m.b.f. extra

On bulkhead flatcars strapping and securement costs about 52¢ m.b.f. extra for material plus say 25¢ for strapping labor; in boxcars securement costs substantially less. Dunnage in boxcars can run as little as 15¢-25¢ m.b.f. On bulk flatcars it has been held as low as 10¢ m.b.f. Hand labor to make up the unit loads a board at a time right in the planing mill should cost less than the same hand labor to loose-load boxcars a board at a time. The only other major cost involved in unit loading is putting the unit load aboard the car with a fork lift. For this the average time is about 40 minutes for the 18 units that go into an average car or about two minutes of fork lift time per unit.

A few mills are already making up unit loads without hand labor by putting a mechanical sorter and unit loader right back of the trimmer.

13. In fixing unit sizes some consideration should be given to the use of dividers

These could make it easier for lumber dealers to break out smaller quantities mechanically. For example, the average small house uses something over 130 studs 7'8" long. In a unit load 4' wide and 4' high, these 130 studs would stack ten deep (16¼"), so lumber yards might prefer units with two dividers, to make it easy to break out smaller units of 130 studs each.

Flatcar conversion to meet freight car shortage would be a big spur to unit lumber shipment

14. The shortage of freight cars that can handle unit loads is the other big problem.

That means either bulkhead flatcars or boxcars with 15' double doors, preferably staggered. There are only 5,000 bulkhead flatcars all told today. One company alone (US Gypsum) expects in time to need 10,000 of them! There are only 97,000 wide-door boxcars (out of 740,000). Our industry could use twice as many.

There is no use arguing now whether we would rather have bulkhead flatcars (which are easier to load and unload but cost money to protect the load against rain and dirt), or wide-door boxcars (which offer better protection but are a little harder to load and unload). We can and must use as many of each type as we can get as fast as we can get them.

A new wide-door boxcar costs about $9,100 compared with about $8,500 for a boxcar with 8' doors and $7,900 with 6' doors. A new bulkhead flatcar costs about $8,500.

15. Quickest solution would be to convert present flatcars to the bulkhead type

This costs anywhere from $400 to $1,800, depending on how good the condition of the old flatcar is and how much it has to be strengthened. The average cost for reconditioning and bulkheading combined would run around $1,100 (compared with about $2,500 for converting a boxcar with 8' doors into a boxcar with 15' double doors).

We believe the railroads would find both types of conversion profitable. As more and more industries adopt unit loads the demand for wide-door cars will increase rapidly. Their faster loading and unloading will reduce their dead time and make them more profitable.

16. Bulkheads eliminate the only serious objection to flatcar shipment

More than 180 test shipments have arrived without transit damage and without transit delays due to the load shifting. Average time from Alabama to Chicago of these test shipments has been three days.

17. Unit loads should be the same for both boxcars and flatcars

The railroads present regulations for the packaging and securement of lumber on flatcars call for units narrower than those commonly used in boxcars. For flatcars they call for a loading 9' wide consisting of two units roughly 3' wide with one slightly narrower unit in between. Unit loaded boxcars usually carry two units 4' wide with a 1' passage between. The railroad representatives at our Round Table say there is no reason a satisfactory loading specification cannot be worked out for 4' units on the bulkhead cars, and the strapping manufacturers at our Round Table say an economical strapping could be worked out for 4' wide units on flatcars.

We believe it would be much easier to sell the 27,000 lumber yards the idea of ordering units if they can order the same sized unit for delivery on either type of car. Unit loads 4' wide would fit on the lumber dealers' 8' wide trucks better than unit loads 3' wide, and the home builders at our Round Table point out that houses are standardizing so fast on a 4' module that they would prefer to have the widths of the lumber units conform.

18. There is no reason why 90% of all lumber shipments should not be unitized

This 90% could include all boards and all dimensioned lumber, even in random lengths. Some items like molding will probably have to be loose-loaded but this 10% should not be allowed to delay the development of unit load shipments for the other 90%.

19. Bulkhead flatcars could carry 75% of all lumber if weather protection against rain and dirt can be worked out economically

This 75% compares with less than 10% on all flatcars today.

Today, gypsum products are shipped under a paper shroud that covers the entire carload and costs something over $5 a car. Plywood is shipped under a car-size shroud that costs about $10. Lumber units, however, are shipped with a separate Sisalkraft wrapping for each unit which costs from $20 to $50 a car, depending on whether the unit is completely wrapped or is protected only on the top and partway down the side.

Once standard unit sizes are adopted for lumber, we believe the wrapping manufacturers should be able to develop standard wrapping at a considerable saving. The present $20-$50 cost (only 1% to 2% of the product value) may not be excessive for dealers who can take advantage of it to store the lumber in the open, but dealers with covered yards will hesitate to pay this premium just to give flatcar shipments the same protection boxcar shipments get without extra cost.

20. For the guidance of the railroads and car manufacturers we suggest that:

Bulkheads should be 8½' high and bulkhead cars should be long enough to provide 48'8" clearance between bulkheads. A clearance of 52'8" would be equally satisfactory to us if that extra space is needed to make them all-purpose cars./END

BUILDER'S STORY:



In 1953 a young Ohio businessman built his first house—and lost $19



Today, Phil English is No. 50 among Cleveland's 300 builders



with one tract sold out, one selling, and land enough for a third

Phil English says he grew from building two houses in 1953 to 60 last year by trying not to make the same mistake twice.

He made plenty—but his mistakes taught him these two rules:

1. "The cheapest way is not always the best."
2. "A smart builder uses every means he can to save his own time and energy and to hold down his overhead expense."

English's first house was a prefab and today he is still a prefab dealer. But he's a prefabber with a difference—and the difference is one of the most newsworthy items in this get-big-quick story. For details, see next four pages.

By 1954 English was finishing this first development . . .



Robert W. Aksell

Westchester Estates *is mostly prefab but has some conventional houses built to compare costs. Prices range from $15,300 to $21,000. English stressed location (33 minutes from downtown Cleveland) and terms (30 year mortgage).*

. . . and learning the wide range of a builder's interests

English's earlier business experience was invaluable in getting money for his first development.

As an ex-president of Cleveland's Junior Chamber of Commerce, he was well known. So, even though he had built only two houses before, he was able to borrow $40,000 from four or five people to start Westchester.

The money was spent on land and improvements. He chose a tract which had city water and gas, but he installed septic tanks and storm sewers himself.

First mistakes involved costs

When English started building, his costs were often figured wrong, and he had trouble evaluating bids. With little previous experience it was hard for him to tell whether bids were high or unrealistically low.

Now he is careful to pin down costs as much as he can but, more important, he allows for unforeseeable items.

About his first house, English says: "When I started out, I wanted to build a house that sold fast, so I priced it down below a sensible level. I wasn't realistic. As a result I cheated myself." Even today, with his corrected pricing policy, English says, actual profits per house are far less than many people seem to think a builder makes.

Prefabs make planning easier

Buying prefab packages helps English keep track of what he spends on materials and, by standardizing building methods, prefabs help him estimate construction costs more closely. Careful comparison has convinced English that conventional construction is slightly cheaper than prefab. But the extra time involved in buying materials and in supervising conventional construction, in his opinion, eats up the slight cost advantage.

English knows the value of keeping credit high. (He says: "without a way to get money a builder is dead"). He processes his subs' and suppliers' bills for payment promptly, keeps controls on each house.

English is considering selling some of the raw land he now holds and using the profit for improvements on the balance . . . a compromise aimed at balancing his two big needs: land to build on and cash to improve it for building.

English: "To grow fast:"

1. "Allow for 'unforeseeable' costs"
English had to learn to include overhead, as well as materials and labor cost in estimates. He once underestimated the gravel fill he needed for a slab, now knows he can't always judge the exact cost of leveling.

2. "Cut down errors by preplanning work"
English buys from prefabbers partly to cut down costly estimating, sizing errors. If he built conventionally, he would pay extra for precut lumber for the same reason.

3. "Never underestimate the power of your buyers' pocketbooks"
At Cambridge Village every buyer ordered optional extras which raise the price. These extras help sell houses.

4. "Use your model house as an office"
For English this has two advantages. It cuts expenses and keeps him right on the job. A telephone answering service records messages and a part-time clerk handles typing and invoicing.

5. "Follow-up every prospect"
Because English uses part-time salesmen who merely show prospects through the houses, he is extra careful to follow up every lead with a telephone call or visit.

6. "Seize every opportunity for promotion"
English's first development had a *Living for Young Homemakers* model. He is building a *House & Garden* promotion house in his current tract. Because he hunted up buyers for both before houses were built, he risked no money, got good publicity in both cases.

7. "Don't waste time on poor land"
To English poor land means poorly located land. He feels builders today have too little cash on hand to sit around and wait until land they hold becomes valuable.

8. "Location of house on site is vital"
English still stakes out each house personally, sells buyers on their lot and house as an integrated package.

9. "You need day-to-day records to keep a close schedule"
When pressure is heavy, English uses work progress chart—doesn't save it for slack times when he has more time, less need for records.

10. "Build a neighborhood while you are building your houses"
Buyers are shopping for a good place to live, not just a shelter. English is planning a swimming pool for Cambridge Village.

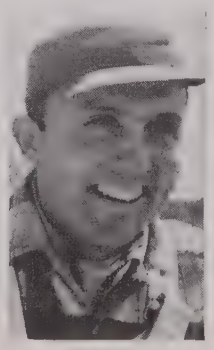
11. "Be ready to change plans quickly"
English built a "shell" house, which buyers were to finish themselves. He found that this idea didn't sell so the house was quickly finished and sold without difficulty.

English's trouble-shooting partner supervises construction



English's brother-in-law, Hal Farver, *joined the firm a year ago, had previous building experience in Dayton. He is the chief "trouble-shooter," likes prefabs because they require less supervision and work scheduling is easier. He gets "adequate-to-good" delivery on prefabs and finds that prompt delivery is often the most critical item in his schedule.*

Head carpenter bosses ten-man crew



Head carpenter Ray Motsch *carries out carpentry work standards set by English, who adapted time and motion study ideas to incentive program. Incentives speed up output, but work requires more checking for quality. Men use power saw, automatic floor nailers, jigs. Young and old found it easy to adjust to prefab construction. Two laborers supplement carpenters and one service man handles any fix-ups new houses require.*

Subs are chosen for service, quality, price



Work with subs was school *where English learned that the cheapest is not always the best. He switched subs frequently until he settled on firms he could count on for quality. Service is the other deciding factor in his choice of subs. He looks for firms that deliver on time, do the job quickly. He returns this service by processing bills for prompt payment.*



Today, English mixes three brands of prefabs in a single tract



Houses are turned on site *to get maximum privacy, and each house is placed on the lot that suits it best, as the site plan at the top of the page and the photo above indicate. Trees are saved whenever possible.*

English mixes prefab brands because he finds it increases his sales and solves his design problems.

Because he chooses from among a wider range of models, English can pick houses with quality features which he knows have buyer appeal. And by careful planning he gets attractive design variation. This variety is especially important in a quality subdivision like Cambridge Village, where his buyers expect to get houses that "look a little different from the neighbor's."

Buying from several different manufacturers makes English a smaller customer with each one, but he gets uniformly good service, has never had a serious delay. English feels that by selecting from several prefab brands he emphasizes his own identity as a builder—and can select and promote his houses and community with complete flexibility.

Choosing from several prefab sources adds little to ordering time, nothing to costs, English says.

Most of the models he selects are contemporary homes with features that appeal to Cleveland buyers: big houses, lots of bedrooms and a generous share of appliances.

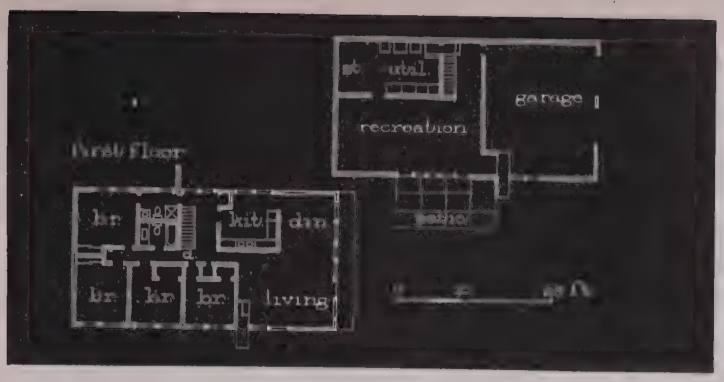


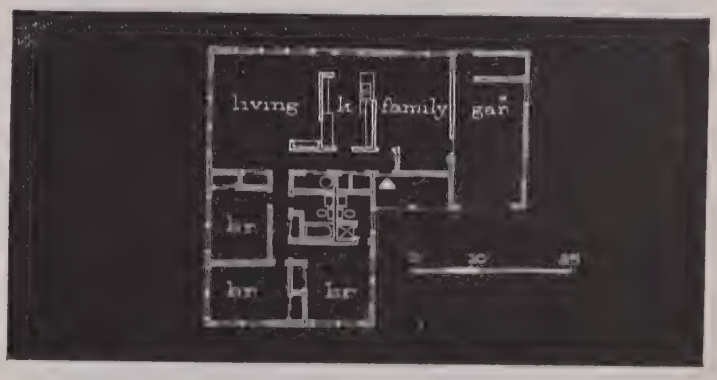
Photo: Robert W. Atwell



Brand 1: Scholz hillside house emphasizes rolling land

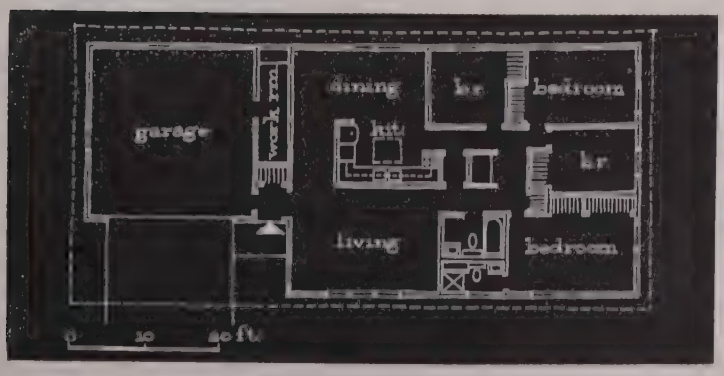
Hillside model by Scholz helps emphasize a feature that buyers like. They also like large lots and the fact that the development is near the city. This house sells for about $30,000, depending on optional extras. Some selling points: Tappan built-in range and oven, General Electric dishwasher, built-in Revco refrigerator, Briggs fixtures, Thermopane window wall, plastic ceiling in bath, wall-to-wall carpeting. In Cleveland, buyers expect enclosed garages, like big bedrooms, separate dining space.





Brand 2: Thyer house features activity room next to kitchen

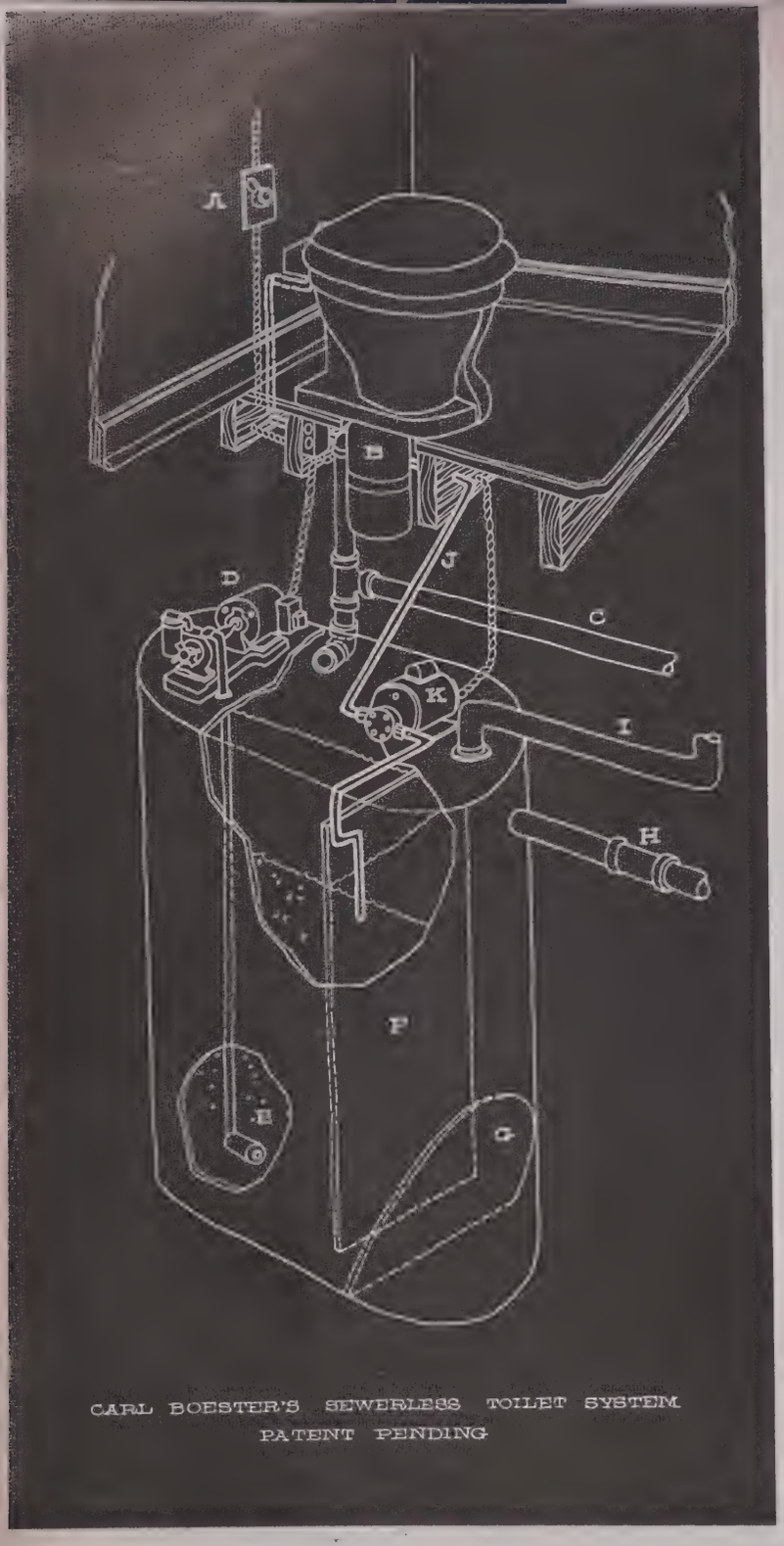
Planned for family living, this model appeals to mothers who like the family room near the kitchen so they can supervise play. In selling these houses, English makes sure the model is not crowded with furniture because, he says: "I'm not in the furniture business." He uses wallpaper and paint to help decorate, puts in just enough furniture to indicate uses. He posts room sizes, has a display showing alternate options. He neither stresses nor plays down prefab construction. Price, $27,000 up.





Brand 3: Midwest house has lots of salable space

Now under construction, this Midwest model has four bedrooms, two baths, to meet English's buyers' desire for lots of usable space. The garage has a generous workshop area. Washer and dryer are tucked into the bedroom hall, where soiled linen is apt to accumulate. Kitchen is centrally located to provide easy access to family room and dining area, has skylight for daytime lighting. Without a basement, the house sells for about $25,900. The model now being built was sold before framing was started.



CARL BOESTER'S SEWERLESS TOILET SYSTEM
PATENT PENDING

How the Boester system works: *When timer switch* **(a)** *is turned, waste from toilet flushes through grinder* **(b)** *down into treatment tank. Waste from other bath fixtures, kitchen and laundry flow through pipe* **(c)** *into treatment tank also. Air compressor* **(d)** *constantly forces air into tank compartment through porous stone* **(e)**. *The bubbling air dissolves oxygen in the liquid to feed bacteria which convert sewage solids into harmless, odorless gases.*

Treated liquid flows under tank divider **(f)** *into settling compartment. Undigested solids settle to sloping bottom* **(g)** *and back into treatment chamber. Excess liquid flows out drain pipe* **(h)** *to underground tile field. Gases escape outdoors through vent* **(i)**.

Secret of the water saving is that the processed, odorless liquid in the settling chamber is used over and over for flushing the toilet. The liquid is pumped to the toilet through pipe **(j)**. *Timer switch* **(a)** *starts both flushing pump* **(k)** *and grinder* **(b)**.

Originally designed just for toilets, the Boester system now handles all waste from the rest of the house (except for garbage grinder). See next three pages for more details.

Now you can buy a sewerless toilet

New device opens up "unusable" land

"A self-contained toilet system needing no sewer connection and only a small disposal field or none at all is essential to the development of large areas on the outskirts of our cities.

"It should be inexpensive, efficient and durable. Almost equally important, it should offer substantial savings in water, a resource we can no longer afford to waste in the primitive function of moving sewage through pipes."

Burnham Kelly, associate professor of city planning, Massachusetts Institute of Technology, Cambridge

The sewerless toilet is a reality.

Five years of research have developed Carl Boester's sewerless toilet into a revolutionary system for the whole house.

This one-house sewage treatment plant should go a long way to solve two of the biggest problems home builders face today—how to meet the growing water shortage, and how to get rid of the water after it becomes waste.

High cost of getting and distributing water perplexes many builders. High cost of sewage collection plagues many others. And failing septic tanks are causing trouble in all parts of the US.

This remarkable new sewage disposal system may solve these related problems because:

1. It cuts water use in the average home by about 50%.

2. It probably will work on land where septic tanks won't.

3. In soils where septic tanks cause troubles, the sewerless toilet's effluent reportedly will never have an odor if it rises to surface (chief cause of septic tank troubles).

4. It works wherever electricity is available, i.e., practically everywhere.

5. It is easy to install in any house, old or new, but you need a competently trained dealer to do the job.

6. It costs no more than a septic tank system at the outset and its operating cost can be paid for from savings gained from lower water bills.

7. Where existing codes permit, it can cut plumbing costs in a new house.

8. It has been tested for five years at Purdue University by Prof. Don E. Bloodgood, one of the nation's outstanding sanitation engineers. Thus it has considerable scientific backing and some state and county health boards approve it.

9. It doesn't use chemicals, doesn't have to be cleaned or overhauled.

Four years ago in Mar., 1952, HOUSE & HOME first broke the startling news of Boester's research. That report was widely reprinted, and Engineer Boester got hundreds of thousands of inquiries at Purdue. Now his perfected product has been thoroughly tested not only at Purdue but in many homes around the country for over a year.

When failing septic tank systems caused trouble like this



Richmond Paladium-Item

Dr. W. R. Taylor (foreground), county health officer in Wayne County, Ind., last year banned septic tanks in much of suburban Richmond after seeing evidence like this of tile field failures. This raw sewage drained from systems installed for houses built in 1955. Failures occurred even after percolation tests indicated the systems would work.

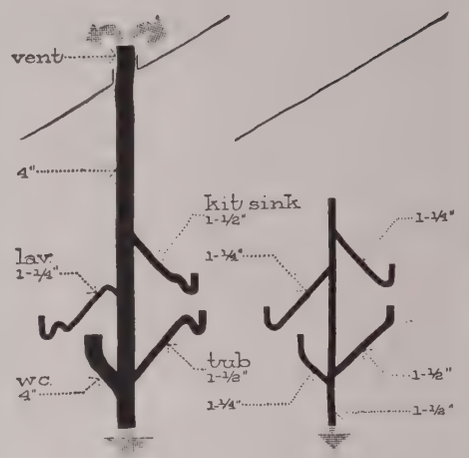
the sewerless toilet made 200 houses like this possible in Richmond, Ind.

Susan Castator



This Scholz prefab was the first house in a 200-lot tract purchased a year ago, shortly before the ban on septic tanks made it unusable for home building. The house went in only last month. N. P. Dodge Co., the developer, learned about the Boester system, later interested Dr. Taylor in it. Taylor's reaction: "It's the best thing I've seen." Builder Ed Nicholson, who put up the Scholz house and installed the sewerless toilet himself, is already sold on its merits. First, he found it easy to install and it cost no more than local septic tanks. Second, the master plumber who installed his other plumbing charged him about $300 less than Nicholson expected to pay for this house. Chief reason for the lower charge: no need for 4" pipes for any part of the drainage system.

Here's what you need to know about the Boester system



Q. *How does the system dispose of waste?*

A. This one-house sewage treatment system handles all waste from bathrooms, kitchen and laundry (except garbage disposal). It is an adaptation of the method used in city sewage plants.

A large supply of air is pumped into the waste liquid to feed bacteria which in turn convert solids to odorless gases. These bacteria are *aerobic* (living only in the presence of oxygen), in contrast to the *anaerobic* bacteria which treat solids less effectively in septic tanks. In the improved Boester system, all waste is discharged into the treatment tank, the toilet waste first passing through a grinder. The constant flow of air enters the tank through a porous stone, producing a vigorous turbulence. Digested solids change into nontoxic odorless gases, are vented outside through a breather pipe.

The tank has two compartments. One returns undigested solids back to the aeration chamber. Liquid in this settling compartment is pumped up to flush the toilet. Excess liquids, including bath, kitchen and laundry water flows out to a drainage field. This tile field is constructed exactly like a septic tank tile field but can be much smaller, because less effluent flows to it and the effluent contains much less solids. The sewage processing is claimed to remove about 92% of solids. A septic tank removes only about 50% on the average.

Q. *Are motors used?*

A. Three electric motors, all standard makes on the market, are used. One 75-w. air compressor operates constantly. One motor operates the water pump, and one operates the grinder.

Q. *How much does the electricity cost?*

A. The system uses about 100-w. per hr. Depending on local rates, the electricity will cost from less than $1 up to $1.50 per month.

Q. *What about repairs?*

A. Most dealers will include follow-up service calls in the installation price. If the system is not abused, repairs should not be costly or time consuming, manufacturer says.

Q. *What does the complete system cost?*

A. Dealers will install it at prices competitive with septic tank systems. Average price nationally may be $600.

Q. *How large a house can it take care of?*

A. It will serve any size family.

Q. *Can two toilets be connected to the treatment tank?*

A. Yes, and from any floor.

Q. *Does the system cut plumbing costs?*

A. Yes, if city codes recognize that standard plumbing procedures do not apply to this entirely different system (in which explosive gases and odors are not involved). As the diagram shows, the system eliminates the need for a large-size vent pipe to the roof, lines and traps for various sinks, 4" line from toilet to treatment tank, water connections to the toilet. And, of course, a regular toilet is not needed. These savings can amount to $300, as they did in the Richmond, Ind. house shown on page 163.

Q. *Do you save on water?*

A. Yes, all the water you use to flush the toilets. Residential water consumption varies from city to city and from family to family. Possibly the national average ranges from 50-80 gal. per person per day in the home. No one knows what percentage of this is in toilet flushings. One flush of the toilet uses from four to six gallons of water. Boester estimates that about half of all water consumed in most homes is for toilet flushing.

Q. *What does the US Public Health Service say about it?*

A. The PHS has made the following statement about this system:

The PHS is interested in any design for sewage treatment which promises a more economical solution to problems of disposal of individual household waste while at the same time providing protection of the public health. A satisfactory system should have a long life, operate economically and be relatively trouble-free. While recognizing that the present design holds promise, the service does not have knowledge of test results, and therefore is unable to comment. The PHS is pleased to see a continuation of efforts along these lines by various investigators. The ultimate application of these devices will depend on their acceptance by state and local authorities.

Q. *Does sludge or scum accumulate in the tank as they do in a septic tank?*

A. Tests at Purdue show no signs of this.

Q. *Do* VA *and* FHA *accept it?*

A. No, although a few VA loans have gone through in several districts. The FHA has taken no position on it because no applications have come through on homes having this sewage system.

Q. *Do any state or local health officers endorse or approve it?*

A. Yes.



Q. *Can you install the system in any house?*

A. Yes, an old one or a new one. In the photo above, you see it installed in a slab house. Here, the waste flows from toilet through grinder below the slab, then to tank installed in the ground outside.

Q. *What do homeowners who have used the system say?*

A. H&H questioned several who have used the sewerless toilet system for a year. None had ever noticed any odors; none had had trouble with tile fields (although in two cases their next-door neighbors had had trouble with septic tank tile fields). One family said its flushing pump motor failed to stop pumping once and needed a quick service call. Another needed a new baffle in the toilet bowl after it had been broken. Said one owner: "I wouldn't take $1,000 for it."



Q. *Can you get the system now?*

A. Yes, through trained, authorized dealers. But only a few dealers have been appointed. Boester is now naming others in various territories. Dealers at present include plumbers, home builders, and realtors. The mobile display shown above is available to them for selling purposes.

Q. *How large a tile field do you need?*

A. It depends on soil percolation tests, and a dealer will use the same basic data as used to determine septic tank tile beds. However, field sizes will be less because less liquid flows through the system.

Q. *Is the toilet noisy?*

A. No more than usual toilets, but you might notice the different sound at first.

Q. *Is the flushing liquid colorless?*

A. Not usually. At the installations observed by H&H the liquid had an amber color.

Q. *How is the toilet flushed?*

A. A hand operated timer switch beside the toilet starts the flush pump and grinder motor at the same time. The switch may be set to flush the toilet and grind the waste for any period up to a minute (45 seconds is recommended).

Q. *Can children use it easily?*

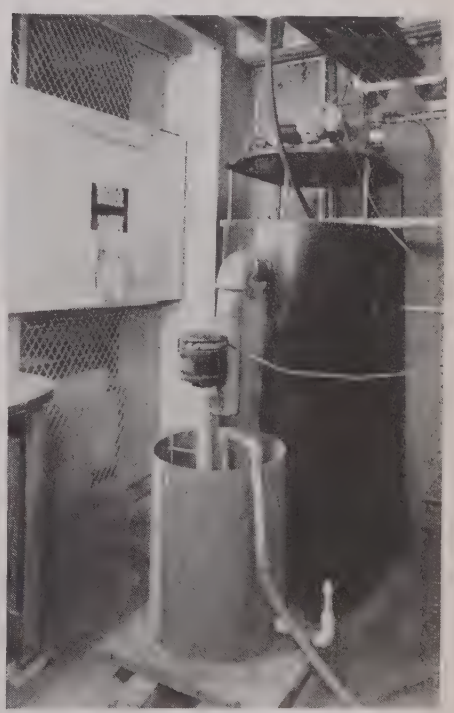
A. Yes. Parents questioned by H&H say their children have had no trouble with the timer switch.

Q. *What if the system breaks down or electricity fails?*

A. Then it won't work, temporarily.

Q. *Do odors ever occur?*

A. They shouldn't unless the system is faultily installed or if the air compressor fails—or if users do not treat it properly (i.e. throwing unusual loads of grease in it). If the air supply fails and the system is not used while the air is shut off, no odors develop.



Q. *How were the tests made, and what is the technical report to date?*

A. Tests have been made at Purdue University for five years under supervision of Prof. Don E. Bloodgood, a member of the Indiana State Board of Health. The photo above shows some of the test devices used over the past five years. Reports show the biochemical oxygen demand in the treated waste is about 20 parts per million; solids in the aeration compartment range from 1,000 to 6,000 ppm, and dissolved oxygen is maintained at 2.5 to 8.0 ppm. Efficiency in solids removal compares well with that of large municipal sewage treatment plants./END

for more information, see p. 292

STRUCTURAL

columns: rolled sections or stamped
beams: rolled sections or stamped
joists: welded rod, angles, stamped metal
lintels, spandrels
studs, purlins
tie rods
plates, clips
caps and bases (post), timber connectors
cellular deck: floor and roof
curtain wall panel
Concrete: reinforcing rods, chairs, stirrups, tie wire
  welded reinforcing frames
  wire mesh
  expanded metal (for light reinforcements)
  anchor bolts, braces

STANDARD ITEMS

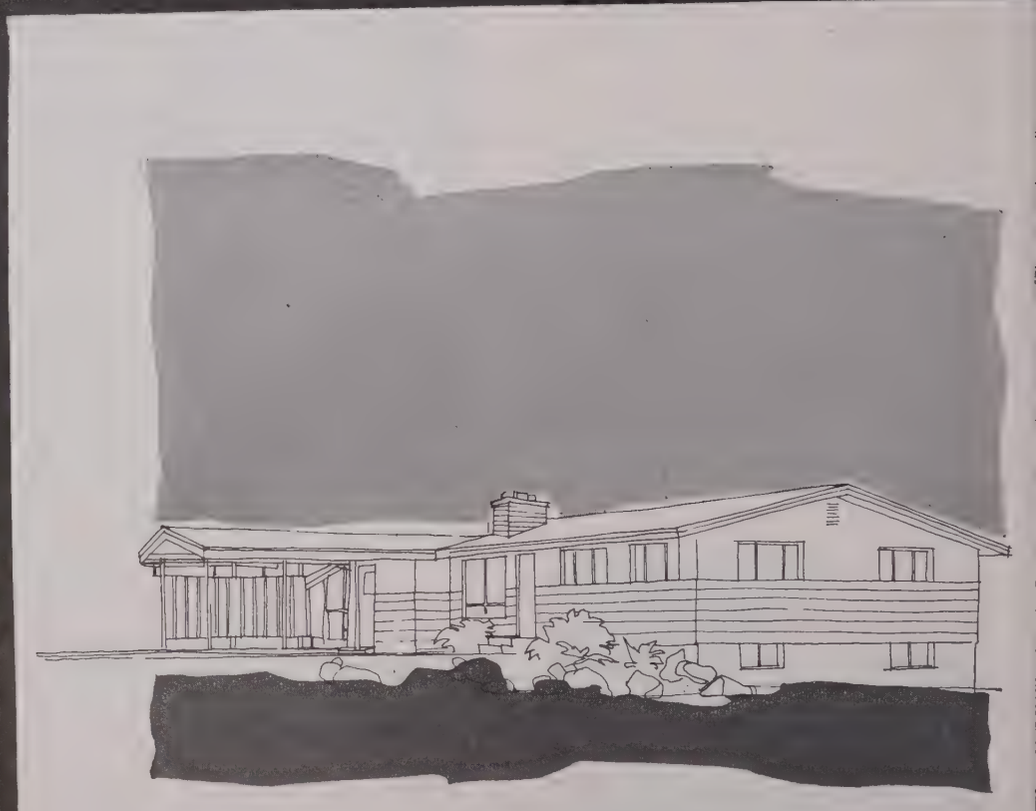
windows: movable or fixed
  sliding glass door
  fixed glass door
  window hardware, fasteners, fins, clips
doors, closet
door bucks
screens
venetian blinds
hardware:
  lock sets: including knobs, escutcheons
  push, kick, protection plates
  door stops
  nails, bolts
  hinges, screws
  joist hangers

ACCESSORIES:

chutes laundry, coal
awnings, canopies, shutters, sun shade louvers
mail receivers
garage door mechanisms
railings, stair, exterior, interior
curtain and blind rods and fixtures
curtain track system
storage cabinet units
storage shelving
sills, threshholds, saddles
ceilings: hung and acoustical panel
area walls
weather vanes, TV antennas, lightning rod
accordion wall partition
planter box, knockers, bells

MECHANICALS

Plumbing:
  waste lines
  vent lines
  mains
  hot and cold lines
  valves
  traps
  meters
  tanks
  tube and sheet
Bath:
  hardware
  fixtures: tub, sink, etc.
  tub enclosure panels
  metal-backed wall tile
  cabinets
  cabinet jams, hangers
  trim
Heating:
  furnace, tank, lines, gauges, motor, meter
  steam and water lines
  enclosures
  radiators
  registers
  tubing, coils
  water heater
Air conditioning:
  unit, ducts
  fans, ventilators
  louvers, louver screens
  enclosure, lines, etc.
Electrical:
  wiring
  receptacles
  wall plates
  light fixtures
  conduit, armored cable
  panel, fuse, meter, etc., lines
Kitchen:
  refrigerator, freezer
  oven, range, broiler, barbecue
  washer, dishwasher
  dryer
  cabinets
  cabinet jams, hangers
  ventilators
  garbage disposal
  trim
  metal-backed tile



Today's house uses more metal than you think

PROOFINGS

insulation (foil)
termite shield
flashing
gravel stops
copings
roofing
siding
gutters, down spouts
splash pans
straps, nails

PLASTER and BRICKWORK

lath: expanded, wire, punched sheet
  corner bead, corners
  hangers, channels, tie wire, nails
stools, window sills
picture rail, base molding
access doors
fireplace hood
flues
brick ties
anchors: joist, buck, etc.

On the way:

New uses for metals in tomorrow's house

Would it surprise you to know that the average 1,200 sq. ft. "wood house" built in 1956 has around four tons of metal in it?

And do you realize this is twice as much as was used just 15 years ago?

These facts may seem startling at first glance; but when you look over the lists of metal house products on the opposite page, you can see that iron, steel, aluminum, copper and brass have invaded almost every single facet of house construction. They have done so for several reasons:

- because metals are precise, and production houses call for precision building;

- because metals are easily fabricated into building parts, and production houses are best built with fabricated parts instead of pieces;

- because metals are strong, stable, easy to finish —and they are getting cheaper to use.

To date, metals have been used helter-skelter in home building: most often metal products are used as substitutes for wood products—which may mean that they are not being used as efficiently as they could be. In other cases, metal products are borrowed from other construction fields—which may mean that they are not dimensionally coordinated with home building modules. And in still other instances, metal products are being used to replace worn out siding or roofing—which means that they are being given a bad name (because people have started to associate them with shoddy construction).

But here and there, metal is beginning to come into home building in a systematic, logical and often handsome fashion. On the way are aluminum and steel curtain walls that will revolutionize home building in a matter of months, not years. On the way, too, are metal roof sections, exterior and interior metal wall finishes, metal ceilings with integral lighting for houses, metal components of every type, size and color.

Few men in metal industries believe that houses will be—or *should* be—*all* metal: most pioneers in this field now agree that the emotional functions of the home will continue to call for warm, traditional materials and finishes in many places.

Precision is metals' unique advantage

But to anyone who has seen the kind of precision work that goes into our planes, trains and trucks—to anyone, in short, who recognizes how far and how fast home building must go to catch up with the precision of the rest of American industry—there can be no question that metals are an integral part of home building's future.

The next 14 pages are a crystal ball gaze at that future. They are an attempt to answer five questions about metals in home building:

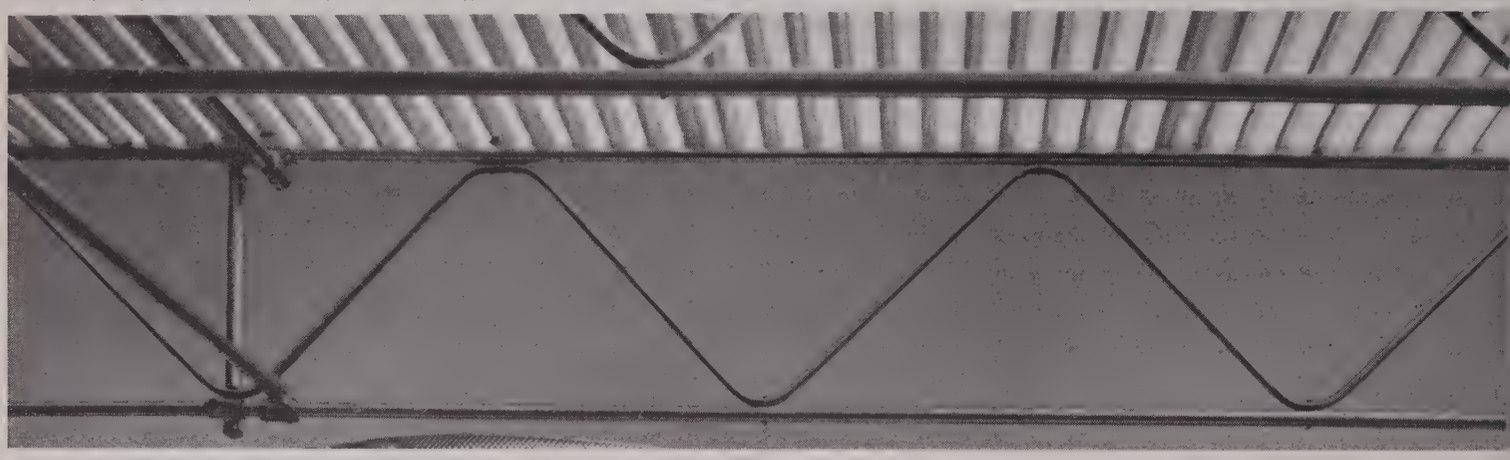
1. Will metals take over house framing?
2. What kind of skin for tomorrow's house?
3. What about more metals for interior surfaces?
4. What's changing in home utilities?
5. And, finally and most importantly, how will the public feel about a metal house?

Much of this discussion is, of necessity, an educated guess. But the guessing is based upon the best information available today from US metals industries. To the leaders of those industries the question is not *whether* metals will enter home building in force, but whether it will happen this year or next.

Metal framing faces two problems: first, how to get away from the habits acquired through centuries of wood framing and, second, how to get interior and exterior sheet materials big enough and strong enough to profit from the wider stud and joist spacing.

One possible answer: forget about metal framing (in the traditional sense), sheet materials big enough and strong enough to profit from the wider stud and joist spacing

Detail of special, aluminum open web joist. Albert Frey, Architect. Photo: Julius Shulman



I Will metals take over house framing?

Too many designers of metal framing systems have jointitis.

"Jointitis" is a disease caused by trying to make a metal stud or a metal joist as flexible as a wood stud or a wood joist.

Its victims are obsessed with the idea they must equal the dimensional flexibility of wood by making their metal framing system out of many small pieces assembled together by means of little connectors and joints. Result: prohibitively high cost.

Three truths about metal framing

Metal framing systems for houses will *never* become competitive with wood until their designers and manufacturers observe three basic rules:

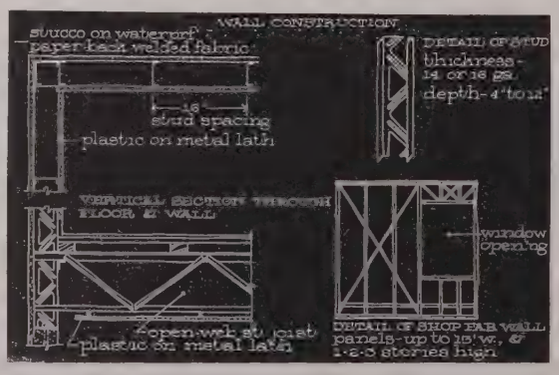
1. Metal framing cannot equal the on-site flexibility of wood framing, because you cannot cut 1″ off a steel stud as easily as you can saw 1″ off a 2 x 4″.

2. Instead, try to concentrate on those qualities of metal that make it superior to wood framing—i.e. dimensional stability, rigidity, strength, ease of painting, elimination of much site labor.

3. And when you do that, you will come up *not* with little pieces of metal that need to be bolted together on the job, but with large metal components. And the only way you can get large preassembled metal components into houses is to accept, in full, the discipline of modular coordination.

Tomorrow's metal house will be framed not with little bits and pieces of metal, but with large, factory-welded or factory-riveted metal assemblies of great strength and stability, all coordinated to fit into a modular system that recognizes that metal is basically different from wood.

Some makers have come out with factory-assembled wall frames (see cut), but even those frames are still made of litle steel studs spaced 16″ or 24″ on centers—hardly complete exploitation of steel's great strength and rigidity. What is keeping the fabricators from making full use of steel's unequaled potentialities?



Courtesy: A.I.S.C.

Details *showing typical prewar steel stud and steel joist system. Framing members were shop-welded into wall panels.*

Significantly, most of today's available finishing materials—sheathing, siding, wallboards, etc.—were designed for a wood framed house. According to Milton Male (of the market development section of US Steel), who has studied steel framing for small residences over the past 25 years, *the chief problem metal framing must face is not how to hold up the roof, but how to back up the wall finishes.*

So long as wall finishes need to be backed up every 16″ or 24″, so long as they must be joined every 4′ or 8′, metal wall frames must provide bracing, nailing or gluing surfaces at close intervals. It is significant that the three experimental metal houses shown on pages



Photo: Edward A. Bourdon

Steel frame house in Houston *Parade of Homes, 1955. Burdett Keeland, architect. Buck King, builder. Brick walls are treated as large panel inserts set between exposed steel columns.*

174-180 do not use traditional, small-scale finishing materials at all: instead they use a series of panel inserts or industrial curtain walls with enough lateral strength to stand up without backing. And they use them in large sizes.

So when you talk about the metal-framed house, you should also talk about the skin for the metal-framed house. Every fabricator knows what he *could* be doing with steel or aluminum—if only somebody would make a new house-skin that would fit into the much larger modular grid called for by metals. The skin that needs the least backing would be metal—perhaps a skin braced throughout by rigid insulation.

Metal load-bearing panels may be answer

US Steel's Male thinks that the answer may be a different type of metal structure altogether. Says he: "The future of metals in housing lies in a load-bearing panel containing, integrally, its own structural members . . . it is quite feasible to build a house out of panels that have their own exterior skin, insulation, interior finish and structural members all in one package." The kind of panel Male is thinking of would be self supporting and strong enough to support the roof as well. Like structural engineers in other fields, US Steel's experts think the skin is too valuable, structurally, to throw away, are sure it can do half the job of holding up the average one-story house.

Abe Charles, director of architectural design and research at Reynolds Metals, is thinking along roughly similar lines. According to him, "the use of the 'electronic brain' will help us explore new structural forms and techniques by relieving designers of the complex mathematics of analysis. Core panels, aluminum-clad steel, stainless steel and aluminum



Photo: Julius Shulman

Steel frame house in Los Angeles, Calif., *Pierre Koenig, designer. Basic structure consists of lally columns and light steel girders, topped with steel decking. Exterior walls are "curtains" of glass, steel and stucco.*

framing members, plastics and adhesives will permit construction of lightweight, high strength, low maintenance structures." These structures, according to Charles, may be far removed from the present day post-and-lintel forms used even in metal framing.

Right now, Architect Eduardo Catalano is working with an aluminum company to develop warped thin-shell forms that will use an aluminum skin structurally—the next logical step beyond Catalano's famous hyperbolic paraboloid house (H&H, Aug. 1955).



Courtesy Mel L-Wood Corp.

Curtain wall panel *with 1" thick honeycomb core, shown during assembly. Skins are porcelain enamel on steel, and 24 ga. zinc coated steel. Adhesives hold the sandwich together.*

Developments like this are more important to home building than to heavier construction: for the house, unlike the tall apartment or office building, does not really need a structural framework independent of the curtain wall. The two can be combined without trouble, and that—according to US Steel and Reynolds experts alike—is exactly the way house construction in metals is going.

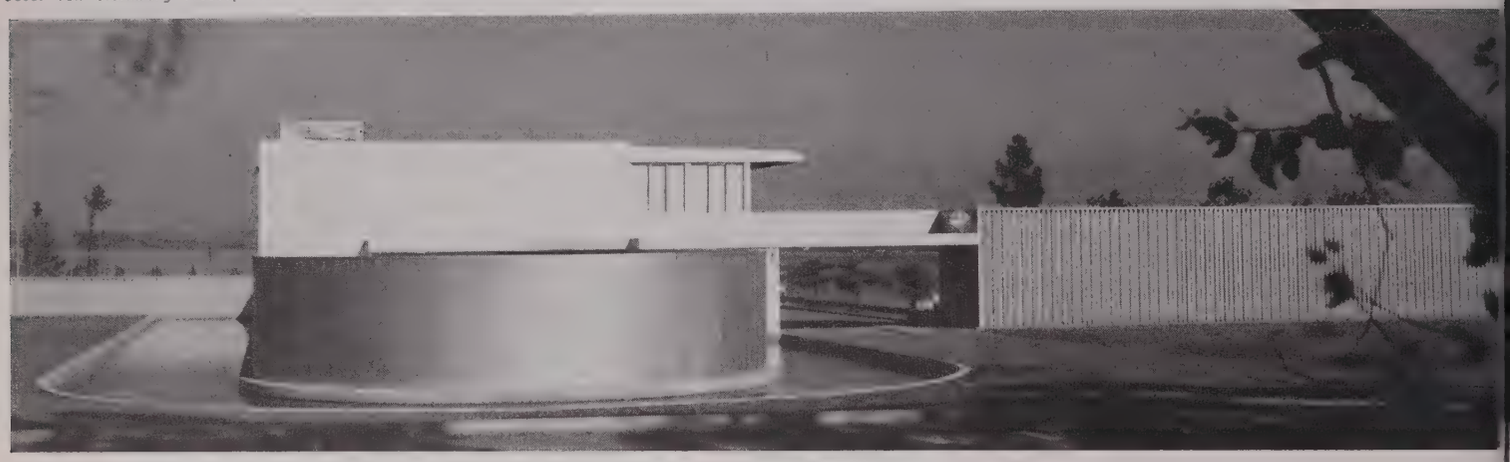


Ernie's Photo Shop; courtesy Panelfab Products, Inc.

Prefabricated aluminum cabana, *designed to be added to typical trailer. All wall panels are 3" thick, with honeycomb core and aluminum skins. Edges of panels interlock. Walls are load-bearing, carry aluminum roof.*

With present metal or wood framing methods, the skin can be made of any suitable material—including metal. But the metal curtain wall needs new dignity and greater decorative qualities to find public acceptance. This need is all the more urgent since experts believe the metal skin will be an integral structural part of tomorrow's metal house and hence very much in evidence

Josef von Sternberg House, 1935. Richard Neutra, Architect. One of the earliest experiments in the use of a sheet steel skin. Photo: Luckhaus Studio



2 What kind of skin for tomorrow's house?

Metal skins for houses got off to a bad start.

Aluminum siding (made to look like clapboards), aluminum roof shingles (made to look like wood shingles) and other metal products (made to look like anything except metal) have given the metal skin a bad name. People associate it with cheap remodeling of old houses because most of these products were designed for the replacement market.

Advantages should be exploited

Even more important, these imitative aluminum products do not make the fullest use of the material.

According to engineer Paul Weidlinger, who has made an intensive study of the architectural uses of aluminum, the ideal type of aluminum roofing would be a series of sheets with batten bar joints. This could be used for as low a pitch as 1½ in 12. The batten joint would work well in siding, too, since it serves to stiffen the metal sheet at regular intervals.

So the widespread imitative use of metals for house skins is not only questionable esthetics; it is also questionable engineering.

Do metal skins really make sense for houses? If they do, what kind makes the most sense?

Steel studs and joists don't need metal skins

If you accept present steel stud and joist framing systems, there is no good reason why those systems should be covered with *metal* skins. In fact, a wood skin, brick skin, stucco skin or plastic skin will make just as much sense—and, in some cases, more sense since some of them do not require a backup every 16", and other skins (like stucco) will benefit from the dimensional stability of the framework and work even better than they would on a wood frame.

But if you believe, as do many advanced thinkers in the metals industries, that the next step in metal houses will be a complete structural wall panel, *with the skin doing much of the structural work,* metal skins of some type are inevitable.

Right now the biggest advances are being made with honeycomb core panels using new "miracle" adhesives to hold the actual metal surfaces. These panels have paper or aluminum cores, are very light, rigid and have good insulating values. Other new panels have foam plastic cores, still others are ribbed and filled with glass fiber insulation.

Metal core panels are available today

Anybody can build an aluminum-faced, paper honeycomb core house. The materials are still expensive but, since nobody really knows how much a traditional exterior wall costs to build, nobody can tell exactly how much more expensive an equivalent aluminum wall would be.

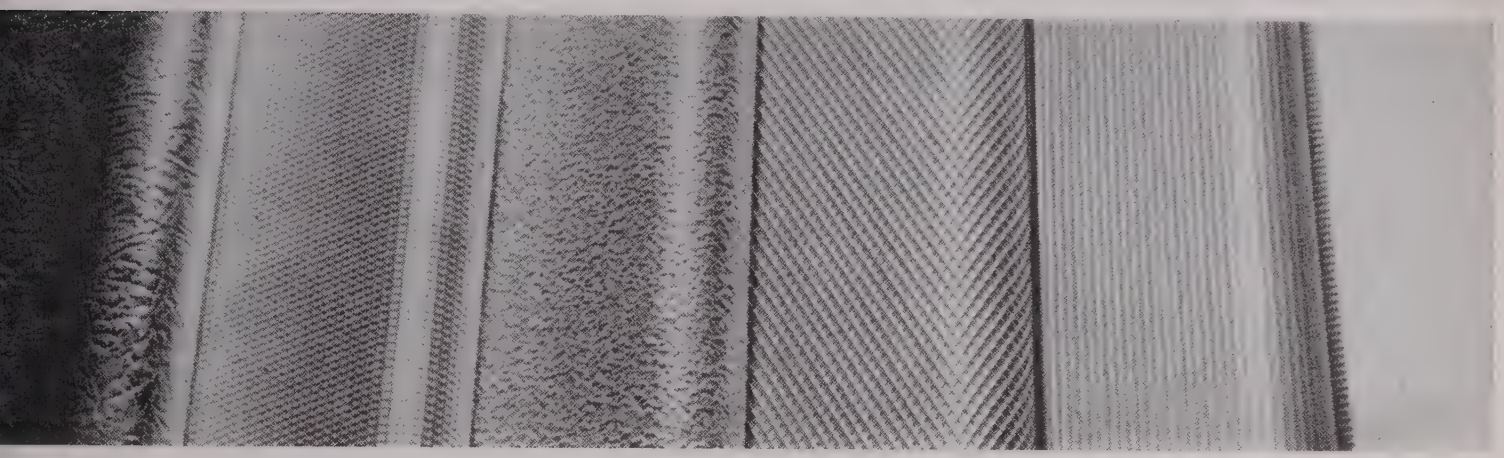
There are great hidden savings in the new curtain walls. Designer William Corns (p. 174) saved enough space for a 70 sq. ft. guest bedroom by using a thin metal skin in his experimental house in place of a wood frame wall. What an aluminum house could save in foundation costs (because the wall is lighter), in initial finishing costs, in site labor and in long-term maintenance is anybody's guess.

Finishes now available make the metal skin impervious to almost anything under the sun, and to the sun as well.

Porcelain enamel on steel or aluminum, epoxy plastic paints, aluminum finishes and colors (and special paints, designed for aluminum surfaces)—these are just a few of the new treatments available. Add to them the more familiar metal skins (e.g. copper roofing) and you have a design vocabulary as complete as any in wood and masonry.

Decorative metal surfaces inside the house are not yet fully accepted by a public that often finds them too cold to the touch and too cold to the eye. To date only prehung metal doors, special metal ceilings and metal surfaces in kitchen and bathroom areas have been widely accepted. But more interior metals are on the way

Embossed aluminum sheets showing patterns ranging from "leathergrain" to stipples and ribs. Courtesy: Reynolds Metals Co.



3 What about more metals for interior surfaces?

Many people think metals are "too cold" to use on wall surfaces inside the house.

If "too cold" means "too cold to the touch," the answer is that metals are indistinguishable to the hand from plaster surfaces, glass surfaces, stone surfaces, brick surfaces or tile surfaces. (They *are* colder to the touch than wood surfaces.)

If "too cold" means "too cold to the eye," the answer is that the metal makers are trying to correct that with new decorative patterns and colors.

Many new finishes are being developed

In the ALCOA building in Pittsburgh, dozens of different aluminum wall finishes and ceiling finishes were used experimentally and they have shown how versatile and attractive metal interiors can be.

In addition to the more obvious uses of metals inside the house, there are two—relatively new—that have proved successful: prehung metal doors, and metal ceilings.

Michigan builder Bob Gerholz believes that metal doors, despite their higher initial cost, save money in the end because once in place they need no further attention. (Warping or swelling of some wooden doors is a major complaint among home buyers; and fixing such doors after buyers have moved into the house can become a big cost item for a builder.)

Acceptance is often slow

Other builders, on the other hand, think more highly of wooden doors because they can be planed down to clear whatever floor finish is used—from an unfinished slab to carpeting on a finished wood floor. Still, with lower costs and some built-in flexibility in the door size, prehung metal doors should become more and more popular.

Metal ceilings for houses are still in early stages of development—not because the metal fabricators don't know how to make them (they have been making handsome metal ceilings for commercial structures for years), but because the costs are still high. Yet, as of today, sound absorbent metal ceilings (for use over open kitchens and family rooms) and luminous ceilings (made, for example, out of aluminum honeycomb sheets, which also have a good acoustical rating) are getting close to the cost range of the average house.

Whether houses *should* be illuminated according to lighting principles first developed for offices and stores is another question. In kitchens, bathrooms and laundry areas such illumination may make good sense; elsewhere a more intimate form of lighting may be preferable.

Coordination of sizes is vital

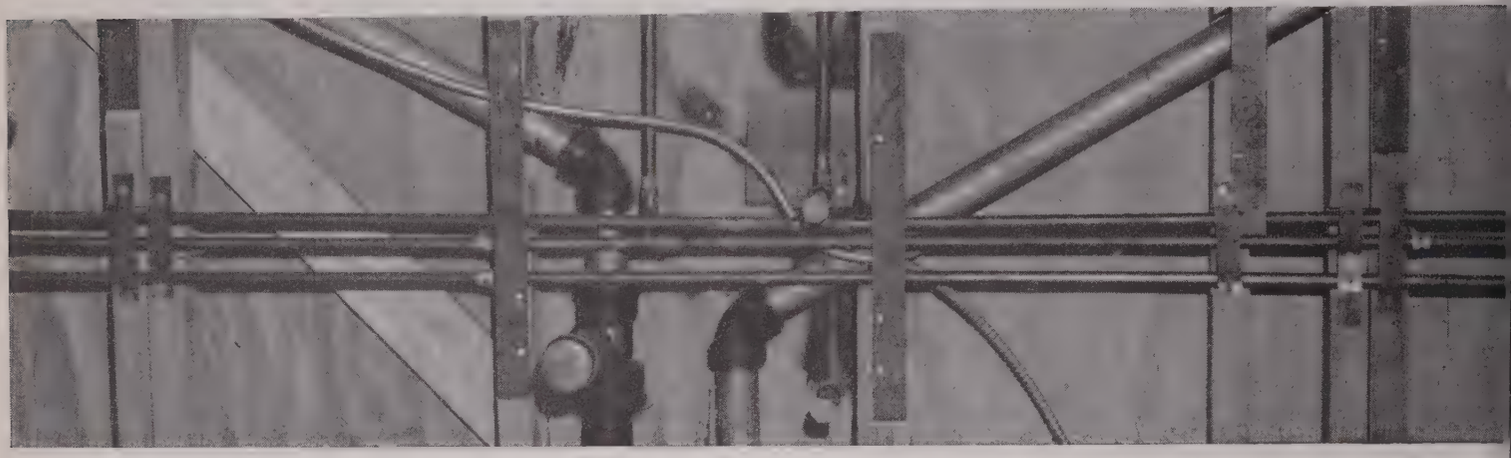
As metal doors and metal ceilings become more common in houses, some popular prejudices may disappear.

There are already successful insulated metal sandwich panels with nonmetallic surfaces (generally of a plastic) glued to the metal skin. Here, as in other uses of metal in houses, the key to success lies in dimensional coordination as much as it does in gaining popular acceptance.

Few experts in the metal industries believe that metals are the answer to all problems of interior or exterior finishes. Most of them recognize that wood and other finishes will be preferred by many people and for many places. And they point out that the metal framed house of tomorrow can easily use such interior finishes: for the development of fasteners and new adhesives now makes it possible to attach veneer plywoods to a metal structure without the slightest trouble.

The biggest news about metals in plumbing, wiring, heating, air conditioning and insulation is that the old standbys may soon encounter serious competition from aluminum and plastics. One reason is the currently high cost of copper: another is that both aluminum and plastics can do a better job in some places than the metals presently in use

LIFE: Ed Clark



4 What's changing in house utilities?

There is no appreciable increase in the use of metals for plumbing, wiring, insulation and ductwork. In fact, plastics are beginning to invade some of these fields to replace metals.

What *is* happening within the metals family is that aluminum and its many alloys are becoming competitive in areas where copper, brass and steel once reigned supreme.

Aluminum piping may cut costs

Copper pipe costs about four times as much as aluminum pipe and the latter can do as good a job in water supply and sewage as copper or steel. Judging by what happened in the ALCOA building in Pittsburgh where much of the piping is aluminum, builders estimate that plumbing costs in similar office buildings can be cut 25% through the use of aluminum pipe. Savings in houses should be even greater because of proportionately fewer connections.

Sole problem: galvanic action between aluminum and other metals to which it may be joined. This does not occur with zinc, lead or stainless steel connections—but all other direct metal connections spell trouble unless a nonmetallic gasket is used. Pipe anchors and supports should be of aluminum or galvanized steel.

Tomorrow's house may well be entirely wired with aluminum. Reason: copper wiring, right now, costs at least 50% more than aluminum, and copper costs —especially at the source—seem to be going up. Aluminum's resistance to current flow requires thicker wiring than copper. This causes some difficulties at terminal connections where the wire has to be bent and twisted.

However, with the advent of new terminal connections, which eliminate all bending of wires (see cut, left) this is no longer a serious problem.



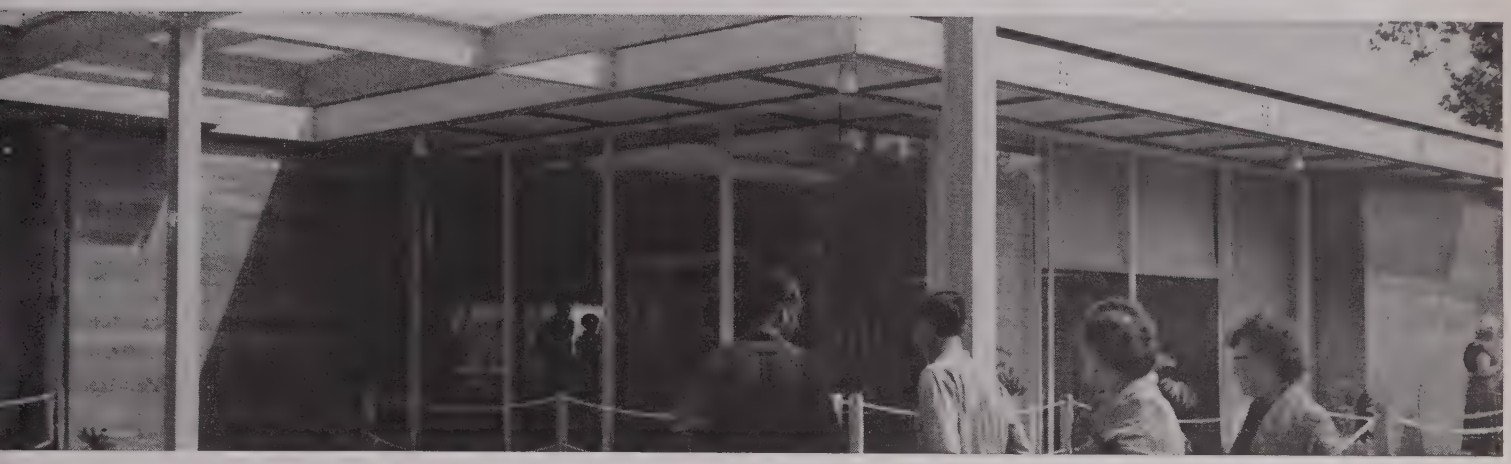
Terminal *for aluminum wire? New connector clamps end of wire; insulation is not stripped, wire is not bent.*

Foil works with air conditioning

Aluminum foil insulation can do a very good job —but only if it is properly used. The foil is very effective in reflecting the sun's rays in the summer, but in the winter it may conduct inside heat to the outside—*unless* the foil has been backed up with another form of insulation that will prevent direct loss of heat in this fashion. In addition, aluminum foil is a superior vapor barrier.

Because aluminum gains heat more slowly than steel, aluminum ducts are much more efficient than steel ducts. For this reason aluminum ducts can be small, and less cool or warm air needs to be supplied to the ductwork to do an efficient job.

Let's not fool ourselves: people will not accept exposed metals in houses unless metal makers set their sights on the highest possible design standards. Unfortunately, most Americans associate metal shelter with diners and gas stations, insist on being shown that the metal house will be a lot different. Meanwhile, traditional materials will find many uses even in metal houses, both to lend warmth and to add contrast



5 How will the public feel about a metal house?

Each year 200,000 shiny metal trailers are bought in the US, many for full-time occupancy. By comparison, less than half as many prefabricated houses were sold last year.

This does not, of course, prove that all (or even very many) Americans are ready to move into shiny metal houses. Neither does the fact that 90% of the buyers of Lustron houses said they would buy a porcelain enamel and steel house again.

Design is big factor

Trailers are among the best planned dwelling units on land, sea or in the air. The Lustron house was, for its time, a remarkably well-designed product. And so are many of the exposed steel-frame houses admired at recent Home Shows (see above) and some of the steel houses now being promoted by West Coast Builder Joe Eichler (see below).

The metal house needs good design not only to overcome a public preference for warmer, cozier materials; it also needs good design because most people associate metal shelter with diners and gas stations—examples of some of the worst design in the US. Metal advocates must prove to a skeptical public that they can do better than that.

They can, as architect Eero Saarinen showed with his beautiful porcelain enamel curtain wall for the General Motors Technical Center.

But, the process of acceptance will necessarily be slow. Steel framing with a traditional skin of brick, wood or stucco is the first step (and it makes sense, too—see below). Even in houses using exposed metal for framing or for the skin, traditional materials can be used for warmth and effective contrast.

How handsome such combinations can be is shown in two of the three houses on the next few pages. And on pp. 174-175 is a house that demonstrates a further advance, still far beyond public acceptance, but not beyond our present-day capabilities: a completely industrialized house of steel and aluminum.



Conventional *house by J&B Builders, Houston, is actually built around a new stud-like steel framing system.*



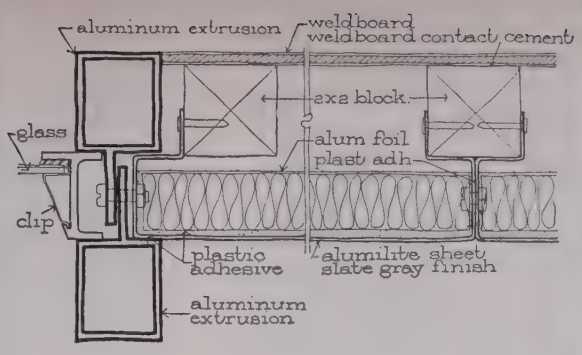
Metal and glass *house by builder Joe Eichler openly capitalizes on its exposed steel roof deck and framing.*

Five steel "Ys", *planted in concrete piers, carry the floor and roof. Pairs of tie rods help to support the floor girders*

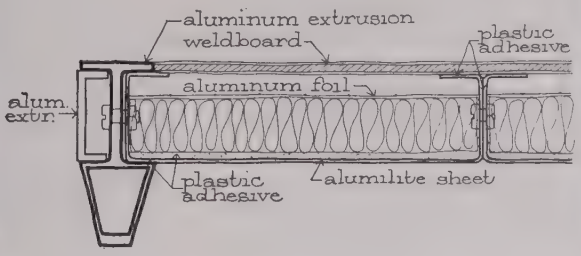
This house experiments with steel frame

Butterfly roof *lets in plenty of daylight on uphill side (east). South end of house (below) is open, serves as carport*





Curtain wall details *(above and below) show how lightweight skin of aluminum was used to sheath the house on all four sides. Uphill side (left and above) has fixed aluminum wall panels with insulating air space, downhill side (right and below) consists of sliding wall units—both opaque and transparent—that can open or close the interior to sun and view. Inside, the curtain wall was finished with ¼" walnut veneer plywood, glued to the aluminum wall panel.*





Photos: Kaiser Services

. . . and an aluminum curtain wall

DESIGNER, BUILDER & OWNER: William M. Corns
LOCATION: Ross, Marin Co., Calif.

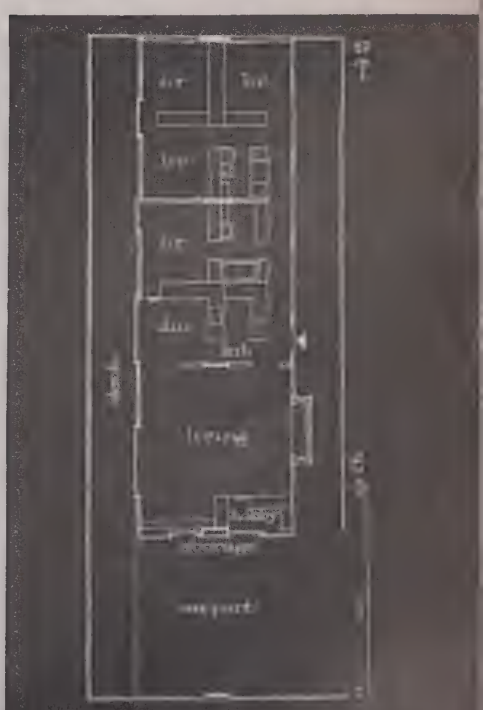
The aluminum curtain wall that sheaths this house was borrowed outright from today's most advanced industrial construction.

Its light weight enabled Designer William Corns to hang his hillside house from a cantilevered steel frame. With the curtain wall he used aluminum roofing on steel purlins. Result: a 2,500 sq. ft. house that weighs only 32,000 lbs., with furnishings—about one fourth of the weight of an equivalent house of traditional materials.

Here is how the house stands up. A single row of five piers, resting on bedrock, is the only foundation Corns needed on a site with a 45° slope. Into these piers he planted five symmetrical, Y-shaped steel frames, and the house is hung from those frames. The steel structure cut down foundation costs.

The curtain wall saves space as well as weight. Here is a house with an exterior wall only 1½" thick (in most areas), stiffened by aluminum extrusions that hold sandwich panels of aluminum, glass fiber insulation and plywood (the latter glued to the back of the panel). Result: a space-saving of about 70 sq. ft. over a traditional frame wall—enough for an additional guest bedroom!

Corns' house looks like something out of a science fiction. It isn't. All he did was to translate into home building engineering principles that every aircraft, train, truck or trailer maker has practiced for years.



In-line plan *has four bedrooms, two baths, deck on three sides. Most partitions are prefabricated storage walls that do double duty as sound barriers.*

Photo - Frank Lotz Miller

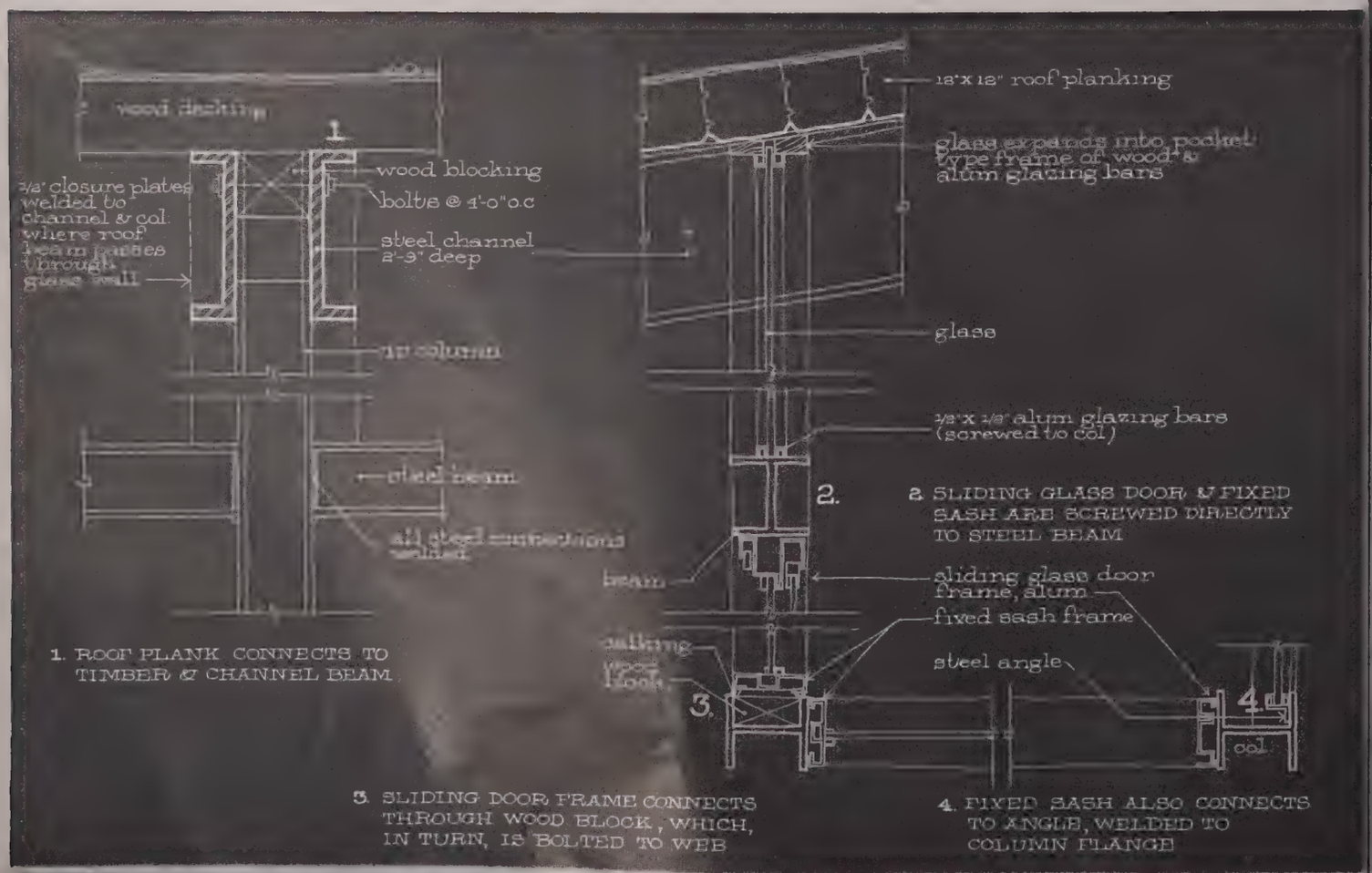


Exposed steel *structure, here at corner of house, frames glass walls. Beam made of timber and two steel channels supports 4" roof planking.*



Aluminum frames *for glass walls are screwed and calked to painted steel structure.*

Here are four good ways to join wood and glass...





Glass walls *on open living-room side of house look out on garden court. Steel framing extends out to serve as trellis. Sun shade (left), is flue tile.*

to an exposed steel structure

ARCHITECTS: Curtis & Davis
OWNERS: Dr. & Mrs. Lyman K. Richardson
LOCATION: New Orleans, La.

The architects wanted to combine the warmth of tile, brick and wood with the grace of glass and steel.

This posed the problem of joining the walls and roof to an exposed, welded steel frame. The solution is seen in four basic details.

Two steel channels, bolted back-to-back with wood blocking between them, make up each roof beam. The 4″ roof plank is fastened directly to the timber.

Metal lines are clean. In joining the aluminum sash and steel structure of this glass-walled house intermediate connecting members, even when used, are not noticeable.

Most of the sash is screwed directly to the exposed steel with nothing other than the calking joint as a barrier between. Where glass walls frame into the web of a steel column, the aluminum sash may fasten to wood blocking or a small angle welded to the flange.

The whole house is laid out on a pattern of squares. On the living side, a garden court lies partly under the overhanging roof, almost like part of the interior.



Floor plan *shows three courts, two of them inside. Column spacing determines wall lines. Brick hallway sets off terrace floor used in the rest of house.*





Steel frame *takes inserts of block, wood or glass just like panels*

In materials and methods this house sums up . . .

Photos: Jason Hailey



In living room, *black steel columns are handsome feature of the window wall. Fireplace hood is black sheet steel, wall is clay block.*

This house is aptly named a "Case Study."

It shows how a steel grid system helps achieve the freedom of design demanded by today's open, flexible plan.

It shows how less than 2 sq. ft. of steel can support over 5,000 sq. ft. of roof.

And it shows how steel and traditional materials like wood, block and glass each can contribute to the structure without encroaching upon one another.

The walls are as flexible as the plan. Any kind of wall can be used any place. Storage walls, partitions of clay block and wood paneling—none of them load-bearing—are set up wherever desired on lines established by the steel grid.

Fixed and sliding window walls, framed in trim aluminum extrusions, fit neatly between steel columns, open up the open plan still more. The regular pattern of black H-columns gives unity to a facade of many different materials.

The only fixed elements are the pinpoint column supports for roof and plumbing stacks.

Designer Craig Ellwood planned the house for the magazine *Arts & Architecture* as the 17th in



Window walls, *framed in aluminum and set between 4" steel columns, line the open sides of living area, right, and bedrooms, left*

the position of metals today

DESIGNER: Craig Ellwood
ENGINEERS: Mackintosh & Mackintosh
CONTRACTORS: Robert E. Henson, David E. Harper
OWNERS: Dr. & Mrs. Stanley H. Hoffman
LOCATION: Beverly Hills, Calif.

its series of "Case Study Houses." Its teaching ideas do not end with the structure and the plan.

Inside the house a white cement terrazzo floor ties together a series of open areas, flows on into the patio. The floor's polished texture is set off by the ceiling of Douglas fir which extends outdoors to create broad roof overhangs. Interior partitions successfully mix a variety of materials.

4" steel columns support the roof. The roof is framed by light steel girders supported on 4" H-columns. The girders support the secondary framing of 2 x 6 joists. Bolts welded to the steel beams support joist anchor plates.

All roof edges are finished with a 5" steel channel fascia painted black. Lighting is recessed into the underside of the overhangs.

Plastic skylights in aluminum frames are set into the flat roof over baths, hallways and pantry.

By fitting wood, block and glass into the light steel grid, Ellwood gave his house a warmth uncommon in a steel structure.

For data on techniques, turn the page.



Plan *shows roofed over area totaling about 5,300 sq. ft., most of it supported by an open grid of 4" steel columns. House has five courts, aside from terrace.*



Photos: Jason Hailey

Glass wall *of children's bedroom is made up of sliding panel and jalousie, both framed into H-column. Double-deck beds are cantilevered from wall.*

Walls frame easily into steel grid

Designer Ellwood anchors traditional materials to steel columns through bolts and plates welded to their flanges and webs.

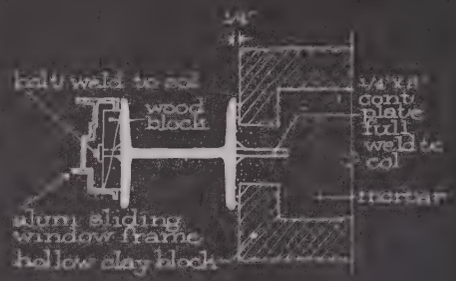
His masonry block is hollow so a simple mortar joint forms an anchor to hold a plate which is welded to the H-column. Masons make the mortar anchor as they lay up the wall.

Aluminum frames for all the glass in the house are fastened to the steel H-columns by wood blocking. The wood keeps the aluminum from direct contact with the steel so there is no danger of electrolytic corrosion. The wood blocking, in turn, is fastened to steel by bolts welded to the columns. Stud and lath partitions are also anchored through similar wood blocking held by bolts to the column.

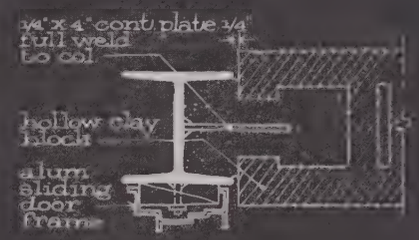
Jalousie *in master bedroom is inserted between steel column, at end of block wall, and wood paneled partition. Partition extends out into private court.*



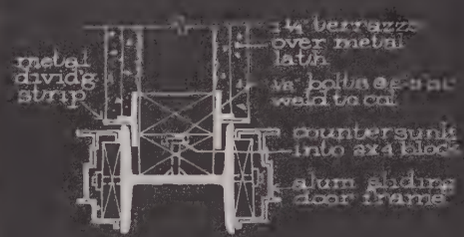
H-column is key to system



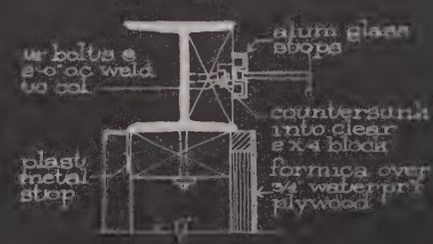
H-column *has anchor plate welded to flange for mortar joint with block wall. Bolt is welded to other flange for window blocking.*



For corner, *a 4" continuous plate is welded to web of H-column for clay block wall anchor. Bolt for window blocking is welded to flange.*



Partition wall *of terrazzo (for bathroom) is anchored by blocking to bolt welded to column web. Bolts on flange hold window blocks.*



Stud-framed wall *at corner is anchored to bolts welded to column flange. Fixed sash is fastened to column web by block and bolt.*

What of the future of metals?

No metal maker thinks of metals as a panacea for everything in the house.

But most metal makers are sure they could do a lot of house building jobs better than they are being done today. Their chief argument: dimensional stability is just about the No. 1 construction requirement for production houses, and metals readily can meet it.

Most metal makers think their future in house construction will be a two-phase process: a gradual improvement of existing methods, and—almost simultaneously—a radical change involving all structures.

The gradual improvement will, undoubtedly, continue for many years to come. Post-and-beam systems, stud-and-joist systems, skin-and-bone systems of construction will all be improved—and all will improve in direct ratio to the improvement of other home building techniques. Example: stud-and-joist framing in steel will become more economical with much wider spacing of both studs and joists which, in turn, will become feasible when stronger, bigger sheet materials are developed to fill in the steel bays. The Ellwood house on the preceding pages is a demonstration of the gradualist approach.

New technology coming?

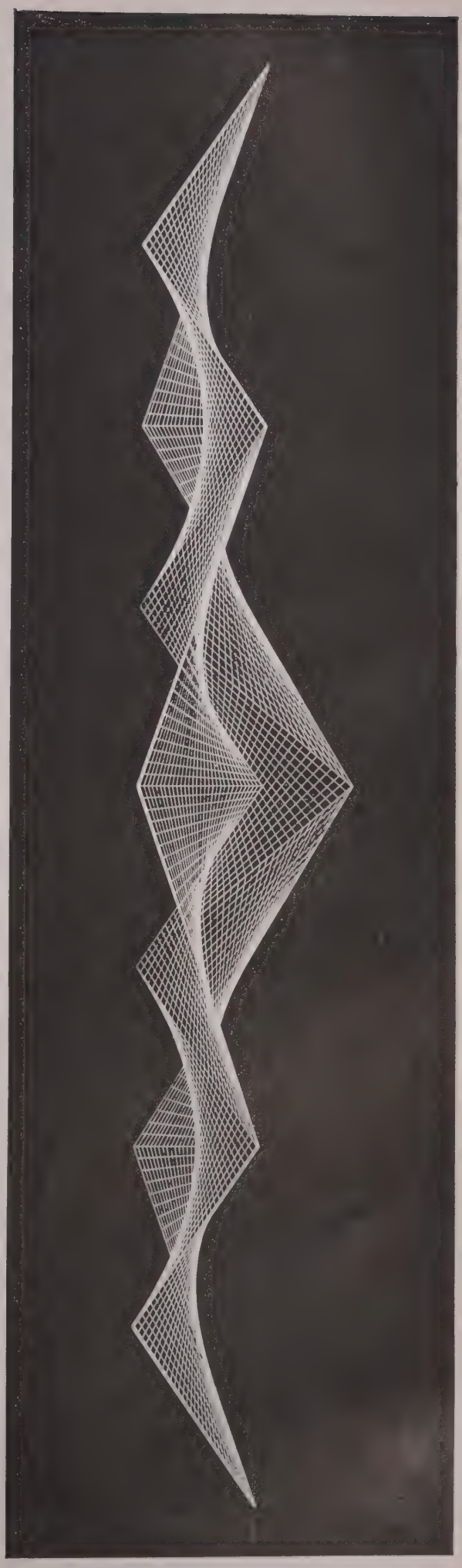
Meanwhile a more radical change in all structures is well under way, according to most steel, aluminum, plastics and shell-concrete experts. This change, as Abe Charles of Reynolds Metals points out, is the result of a new understanding of the enormous strength inherent in skin structures alone.

Designers in advanced metals research are fast learning to compute skin structures that were barely understood a mere dozen years ago. And their computations, it is claimed, may soon render obsolete all the steel post-and-beam structures that have created such a stir in the past few years.

New forms are on the way

What these metals, plastics and concrete engineers are saying is that *with the coming of continuous skin structures, the rectangular cage of wood or steel*—so radical today—*will become as quaintly old-fashioned as the gingerbread house of 60 years ago.*

At least one architect understood this fact quite some time ago. "Of course, this primitive post-and-beam construction will always be valid," said Frank Lloyd Wright in the early Thirties, "but both support and supported may now . . . be plaited and united as one physical body: ceilings and walls made one with floors and reinforcing each other by making them continue into one another . . . A new world of form opens inevitably."/END



Drawing: courtesy of Architectural Forum

→

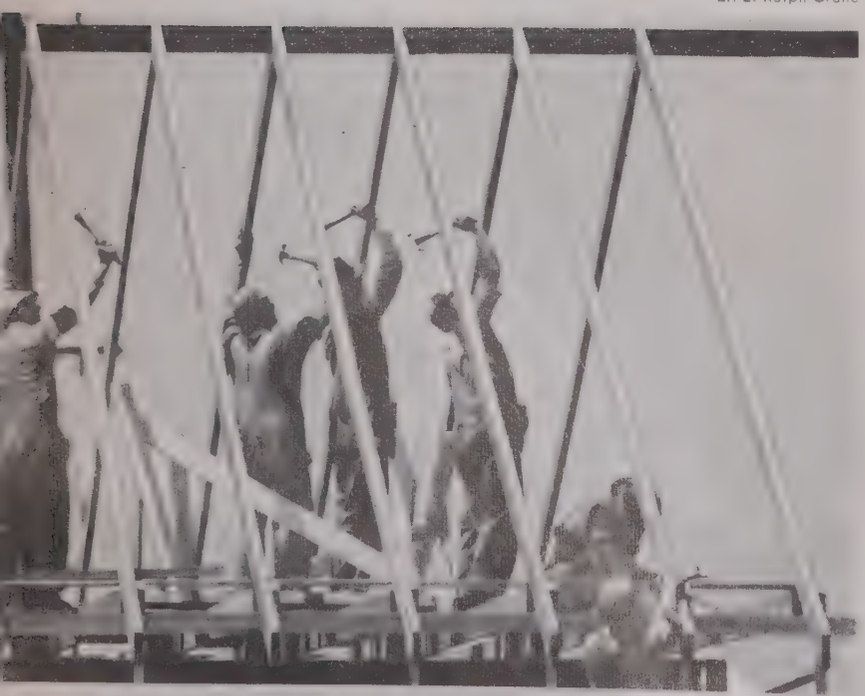
New forms *of the future, like this elevation of 18 complete hyperbolic paraboloids, may give wonderful new possibilities to designers of metal skins.*

H&H's Round Table on Mechanization reported (Jan. '56 issue):

"The new portable tool that builders and prefabricators are most eager to use is not yet available—a self-feeding pneumatic (or perhaps electric) nailer as light as a portable saw, that will drive 60 or more regular nails a minute. Not just down, but also up, or at any angle . . ."

Now three makers offer you . . .

LIFE: Ralph Crane

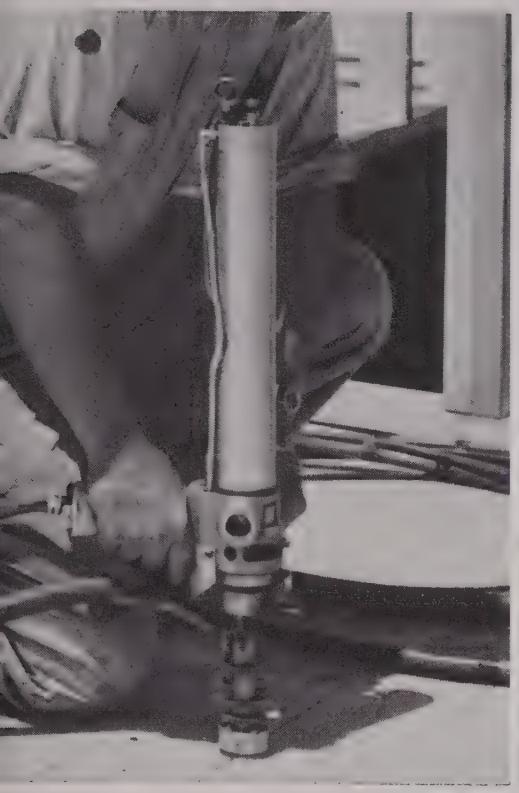


Nailing manhours *for average house cost up to $250*

Common nails *can be uncommonly expensive, not in themselves, but in the labor required to drive 50,000-100,000 of them in the average house (an all-nailed experimental house used 67,000). Even in assembly line production, builders must count on 80-90 hours of nailing time alone in their carpentry bills. And every one of those nailing hours costs an average of $3.04 (BLS Jan. '56).*

Two other basic carpenter skills, fitting and cutting, have already benefited from Twentieth Century technology. Off-site fabrication and modular components have cut layout time; the electric hand saw is now almost an extension of the carpenter's hand and has reduced on-site cutting time to a minimum.

Nailing has lagged behind. Each nail has had to be driven home by hand, an operation practically unchanged for centuries.



Morgan's Nail Driver



Matrix's Nail-A-Matic



United Shoe Machinery's Power Nailer

this most wanted tool

THREE portable, air-driven nailing machines are now coming on the market.

They may save as much as $175 per house.

Made by three different companies, the new machines are light and fast. They meet all the other basic requirements set down just five months ago by members of HOUSE & HOME's first Round Table on Mechanization (see quote on opposite page).

The lightness and portability demanded in the tool could only be achieved by divorcing the nailing head from the weight of both the nails and the power source. All three of the new devices use the same general means: a central hopper for nails, equipped with an automatic sorting device that separates the tangled nails and feeds them—point first—to the hammer through lengths of flexible hose.

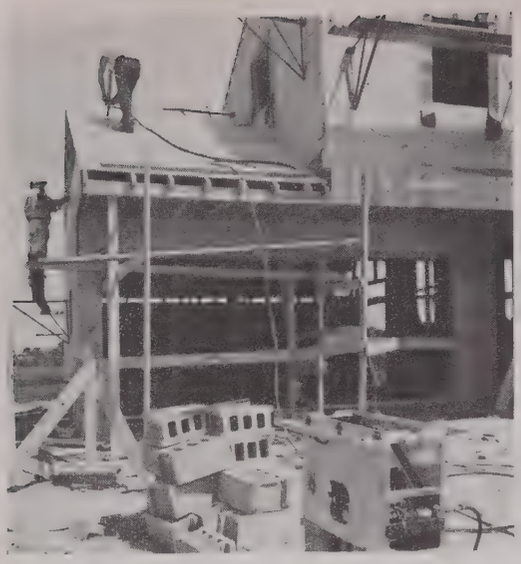
At normal production, a hopperful of nails (8-10 lbs.) will last several hours.

The machines shown above and on the next page are light (from 5 to 8½ lbs.). They drive nails up, down, or at any required angle and have safety devices that make it impossible to fire the nailer unless it is in contact with the work. The same impulse that drives the nail home pulls the next one into place from the hopper. Hoses range in length from 12′ to 25′, but longer lines can be used as long as the required pressure can be maintained.

How the nailers work

Power for the nailers is provided by a conventional compressor (3 h.p.) that can furnish the 90 psi. pressure required. In constant operation, the machines will use 10-15 cfm. of air.

The 60 per minute capacity asked by H&H's Round Table can be met easily by any of the nailers on bench jobs, but few on-site operations permit the machines to be operated at top capacity. Usually, the capacity is limited by the time spent moving the head to each nail location. But 30 per minute is quoted as "average," and that means a reduction of ⅔ in nailing time.



One blow and it's nailed!

The Morgan Nail Driver is a single-blow machine that punches the nail home in one motion. Using 4d to 8d nails, the machine will drive up to 60 per min., with an average of 40. The driving head weighs 8½ lbs., and the feeding unit 65 lbs. Nose adapters permit nail driving at almost any angle. Hose lengths range up to 50′. Price: $1,200.
Morgan Machine Co., Rochester, N. Y.



Nailing, woodpecker style

An oscillating hammer in the Nail-A-Matic hits the nail head 70 times per second and three driver sizes handle all nails from 2d to the 16d nails used for framing. Nails can be driven flush, countersunk (as for drywall), or left extended. A detachable hopper can be dumped whenever nail sizes are changed. Price: $980-$1,080.
Matrix Engineering Corp., Minneapolis, Minn.

For other New Products, see p. 202



One hand for the job

Power tackers, long used in the furniture industry are lineal ancestors of the Power Nailer, just being put into pilot production. First models, which weigh 5 lbs., will accommodate nails only up to 1¾″, but will drive over 100 per minute. The feeder-separator holds 10 lbs. of nails and feeds them through a plastic tube to the nailing head. Price: $950.
United Shoe Machinery Corp., Boston, Mass.



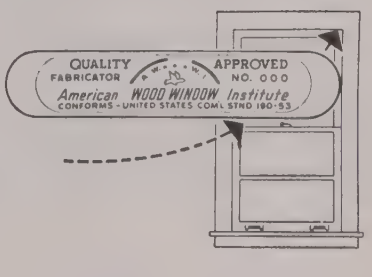
When they look for clues to quality here's a convincer!

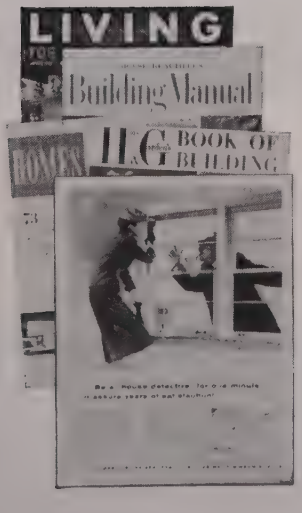
Millions of prospects for new homes or for remodeling—including *your* prospects—are learning about this seal.

They are learning that the AWWI Seal of Approval on wood window units is a convincing mark of quality in a house—windows which comply with the quality specifications of U.S. Commercial Standard 190-53. They are getting the AWWI seal story in the big national magazines they read—LIVING FOR YOUNG HOMEMAKERS . . . HOUSE BEAUTIFUL...HOUSE & GARDEN...SMALL HOMES GUIDE.

It's all part of a nationwide promotional program. This program can work for *you* by furnishing instant identification of quality in windows —and by identifying YOU as a quality builder. Included in the program is a special certificate of window quality, proving that the windows you install, bearing the Seal of Approval, comply in every respect to U.S. Commercial Standard 190-53. A mighty valuable sales tool—as builders are finding out.

How can you tie in to this promotion? By asking your supplier for wood windows bearing the AWWI quality seal. Certificates of quality for home owners will gladly be furnished you through the same source. American Wood Window Institute Seal of Approval Division, Ponderosa Pine Woodwork, 105 West Monroe Street, Chicago 3, Illinois.





What the AWWI seal of approval means for wood window units

1. Correct in design and construction
2. Made of carefully selected lumber
3. Preservative treated for lasting durability
4. Equipped with properly balanced sash for easy operation
5. Efficiently weather-stripped for weather-tightness

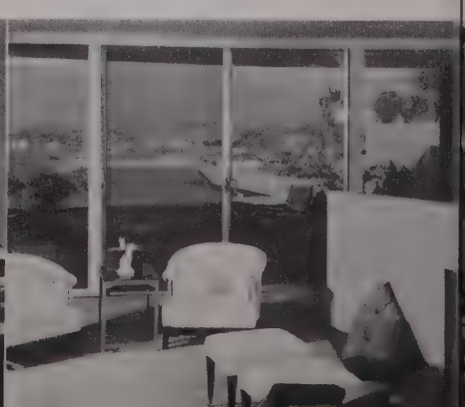
This full-page ad is typical of AWWI Seal of Approval advertising in big national magazines reaching home owners.

Beautiful Ador Custom Handle *adds distinctive note of luxury. Ador doors are found in all types of construction — from project homes to luxurious custom residences.*

$10,000 Project Home offers owners indoor-outdoor living with competitively-priced Ador sliding glass door.



$20,000 Custom Residence on the coast has beautiful alumilited all-aluminum sliding units by Ador.





Luxury Look of Sliding Glass Doors Sells Buyers in '56 market

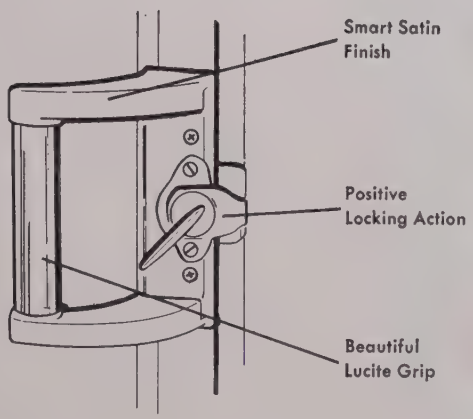
More luxury is the home buyer's greatest demand. It is the home builder's key sales secret. Foremost among "demand extras" are sliding glass doors.

Every day more and more Americans are buying homes that offer the luxury of indoor-outdoor living provided by sliding glass doors. These buyers judge the sliding glass door by the quality and appearance of its handle.

Outstanding in the field is the distinctive custom hardware on Ador sliding glass doors. The beautiful lucite grip handle, with its luxurious satin-silver finish, is an appealing sales argument for the home buyer.

Good design is a characteristic of the Ador door. Custom details include snap-on glazing bead for finished glass lines; rigid, tubular aluminum design; and a lustrous alumilite finish which resists corrosion indefinitely.

Custom hardware is another example of Ador's design leadership. Yet, with all these custom features, Ador units are priced to meet competitive conditions. For information and specifications, write to Ador Sales, Inc., 2345 West Commonwealth Avenue, Fullerton, California.



Ador Hardware Design



Striking Custom Design Hardware is this Ador handle here being examined by builder John Pagliuso. This beautiful precision hardware is distinctive detail of the Ador door.

50,000 Luxury House features ninety-seven feet of Ador ding glass doors opening on a patio-pool area.

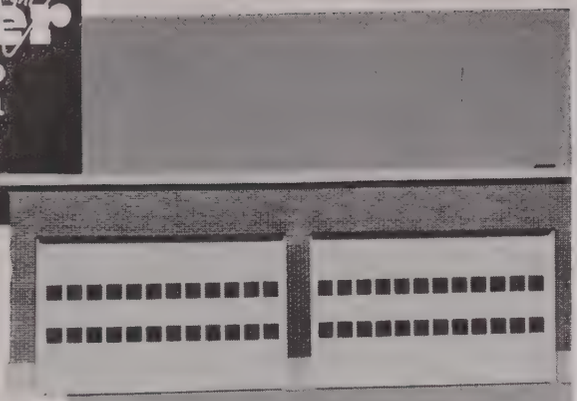


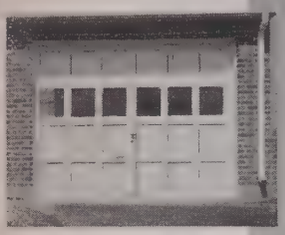
Ador

America's Foremost
All-Aluminum Sliding Glass Door

calder
OVERHEAD SECTIONAL GARAGE DOORS

COMMERCIAL





STURDY

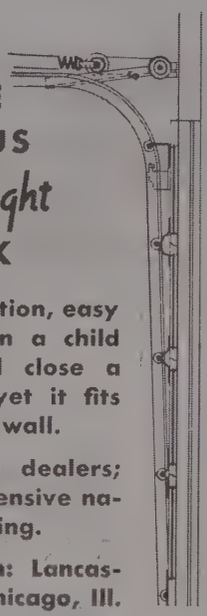
. . . a *Style* to blend with any architecture

. . . a *Size* to fit any opening, both residential and commercial



TRILINE

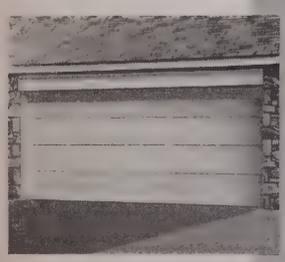
ALL DOORS FEATURE THE FAMOUS *Wedge Tight* TRACK



for fast installation, easy operation. Even a child can open and close a Calder door, yet it fits like part of the wall.

Sold direct to dealers; backed by extensive national advertising.

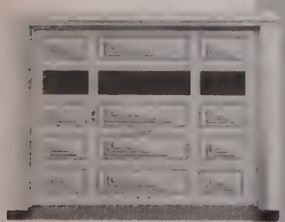
Warehouses in: Lancaster, Pa. and Chicago, Ill.



FLUSH



LEVELINE



RAISED PANEL

Free!



Catalog gives complete specifications on Calder's full line. Colorlog shows the Calder way to achieve custom effects without custom costs when home owners want decorated garage doors. Send for your copies today.

Every Calder door can be equipped with extension or torsion springs and can be electrically operated and radio controlled.

calder MANUFACTURING CO., Lancaster 15, Pa.

Panel members of the Materials Handling Round Table

Story and pictures on page 154

American Institute of Architects

JOHN HIGHLAND, past chairman
Home Building Industry Committee

National Association of Home Builders

RALPH JOHNSON, technical director
EDWARD PRATT, chairman, Research Institute
ANDREW PLACE, trustee, Research Institute

Prefabricated Home Manufacturers Institute

GEORGE PRICE, president

ALLEN WARNE, vice president Precision Homes
FRED SAMERDYKE, president
Harnischfeger Homes

National Retail Lumber Dealers Assn.

PHIL CREDEN
Edward Hines Lumber Co.
JOHN GROSSMAN, vice president
L. Grossman & Sons, Inc.
R. A. SCHAUB, president
RAYMOND HARRELL, research director
CLARENCE THOMPSON, chairman
JOHN MOELING, president
Sterling Lumber Co.

V. JOSEPH WARDEIN
Ginter-Wardein Lumber Co.

Consultants

JAMES T. LENDRUM, director
University of Illinois Small Homes Council
DAVID SLIPHER

Materials handling equipment

DAVID A. MILLIGAN, vice president
American Tractor Corp.
R. G. KLEIN
Baker-Raulang Co.
FRED L. BAUMANN
Caterpillar Tractor Co.
R. H. DAVIES, vice president
Clark Equipment Co.
FRANK W. CONOVER, manager
Industrial Sales Department,
Tractor and Implement Div.,
Ford Motor Co.
H. G. CLARK, sales manager
Gar Wood Industries, Inc.
ROBERT MOODY, sales manager
Hyster Co.
CLARENCE MERTZ
International Harvester Co.
R. G. HURLBURT, asst. mgr. Ind. Div.,
The Oliver Corp.
R. W. HUMES, asst. sales mgr.
Sherman Products, Inc.

Manufacturers

WAYMON H. BROWN, vice president
Lumber Operation, Frost Forest Products Div.,
Olin-Mathieson Chemical Corp.
PAUL R. VICKERY, sales mgr.
Lumber Products
Frost Forest Products Div.,
Olin-Mathieson Chemical Corp.
E. C. CERNY, commodity manager
Colorbestos
Johns-Manville Corp.
ROY F. SEEBER, planning and scheduling
Johns-Manville Corp.
ALDEN SMITH, sales manager, TECO
National Lumber Manufactures Assoc.
RON DOOLEY, head of materials handling,
National Gypsum Co.
ARTHUR LAHEY, mgr. product lines
Weyerhaeuser Sales Co.

Transportation

FRED BLAIR, midstates transportation
American Trucking Assoc.
V. L. GREEN, asst. supt. cars
Chicago, Milwaukee, St. Paul and Pacific
J. F. LIKARISH, master car builder
Great Northern Railway Co.
G. J. LEHNERER, asst. mechanical and
research eng.,
Illinois Central Railroad Co.
FRANK E. CHESHIRE, manager
Railway Div., International Steel Co.
STEPHEN NAGY, supt. car equipment
Pennsylvania Railroad Co.
J. F. ROBERTS
Pennsylvania Railroad Co.
STANFORD NELSON
Pullman Standard Car Mfg. Co.
N. A. WILLIAMS, engineer, Car Dept.
Union Pacific Railroad Co.

Wrappings and plastics

C. R. LAMMERS
Acme Steel Co.
W. E. PATTY
Acme Steel Co.
FRED STEVENS
Americas Sisalkraft Corp.
JAMES R. WILLIAMS
Signode Steel Strapping Co.

Moderator

P. I. PRENTICE, editor and publisher
House & Home



build faster...
sell faster *with the*
BEST-VENT®

PRIMARY ALUMINUM WINDOW

like this successful builder!

Spencer Qualls, operative builder in Forest Hills Addition, Springfield, Ohio, says:

"I build quality homes on a speculative basis. To insure fast sales, I put only top-quality products into my houses—products like the Best-Vent Aluminum Window.

"Best-Vent's ease of operation and appearance really make a hit with home buyers! Best-Vent is an easy, time-saving window to install—I know, because I've installed this window myself. And its ruggedness prevents call-backs which would delay my new construction."

build faster— *25% to 50% savings in window installation time!*

Finished window can be installed and trimmed in minutes—here's how: Best-Vent arrives individually cartoned, ready to install. Simply snap on pre-cut fin trim and lift into place. Drive one nail through sill fin and sheathing into framing; with nail as pivot point, level frame, square and plumb; then finish nailing around extra-wide fin trim. Aluminum interior finish trim or plaster trim is available and fits quickly into place; no cutting needed. No hardware to install, no final adjustments to make. Snap-on mullion covers unify multiple installations.

sell faster— *Double-Ventilating Action gets fast sales action!*

Prospective home buyers love Double-Ventilating Action—exclusive with Best-Vent by Per-Fit. Freshens the air in any room *automatically*, when a fingertip touch opens top *and* bottom sash at the same instant. Hot, stale air "piled up" at ceiling level is quickly released, instantly replaced by fresh, cool air flowing in at the bottom. This is just *one* of Best-Vent's exclusive features . . . and Best-Vent is just *one* of the fine primary aluminum windows in the Per-Fit Line. If your dealer isn't acquainted with them, let us know—or have him write to:

PER-FIT PRODUCTS CORPORATION 1129 E. 52ND STREET • INDIANAPOLIS 5, INDIANA

New machine cuts costs, speeds output of rafters

Automatic wood cutter precuts timber 2½ times faster, 50% cheaper than handwork

This new lumber cutter automatically precuts and notches 250 rafters an hour.

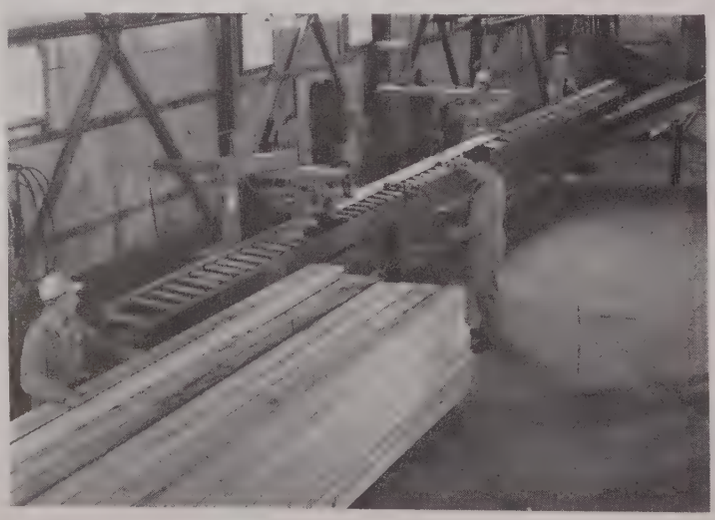
The cost of cutting rafters can be reduced by more than 50% per house and the machine is "two-and-a-half times faster than previous methods."

Designed especially for builder needs, the machine can also speedily turn out quantities of other precut timber like posts and headers, according to Stanley W. Sampson, President of Pittsburgh's Glenn Lumber & Supply Co., who showed it to local builders last month.

Developed in 18 months. Sampson began looking for a machine to cut and notch lumber fast and automatically several years ago, found none on the market. About 18 months ago he met with the Delta Power Tool Co. and Grand Rapids wood machine maker C. O. Porter, who jointly agreed to tackle the job of making a special design for Sampson. How well they did can be seen by the machine shown on this page.

It is about 40′ long, fully conveyorized and costs $12,000. It is built around two standard 16-20-in. radial saws which can be moved back and forth to handle lumber from 3′ to 20′ long. The machine can be automatically set to make "an unlimited variety of straight cuts, angle cuts and notches."

How it works. One man at a centrally located control board operates the machine. A second man feeds in raw timber at one end, a third man removes and stacks finished pieces at the other end. Wood fed to the machine is drawn into position by belt-driven rollers, see below. At a predetermined point in the wood's travel, it is stopped and held firmly in position by automatic clamps from the control board.



New automatic lumber cutter *is operated by man at push-button panel board, a second loads conveyor (in background), and a third removes finished rafters (lower left). Rafters are edge-cut at each end, notch-cut in middle.*



Photos: Rockwell Mfg. Co., Newman Schmidt Studio

Two standard radial saws *are mounted on lead screws which enable them to be moved back and forth along the line of travel to handle lumber from 3′ to 20′ long. Beam is clamped into position, see above, when operator pushes button. Another button controls saws and notcher. Scraps and sawdust are removed automatically by moving belt.*

Other controls start the saws and actuate the notcher. When all cuts are made, the operator pushes a button releasing the clamps and a finished rafter rolls to the end for unloading every 14 seconds.

Saves $40 per house. Sampson is already using the machine to precut wood for his builder customers. He previously precut lumber for builders at a cost of about $75 per house. Using the new machine, he can precut the same amount of wood for about $35. Exact cost varies with the quantity of wood per house.

Sampson estimates he will get back the machine's cost on the first 300 jobs for builders (which should be sometime before a year is up). Similarly, the machine will clearly pay its way not only for other lumber dealers but for many big builders, too. Glenn Lumber is part of Sampson-Miller Associated Co's., Pittsburgh's largest house builders. (See H&H Jan. '56.)

Tough, vinyl screening helps add outdoor living to builder houses

A vinyl-coated Fiberglas screening makes it possible to add large outdoor living areas to low cost builder houses.



Trend to screened patios, *like this one, is growing. Note wide wall panels, right; screening can span up to 6′ wide in walls with no cross members, no sagging.*

The new material is cheaper and easier to fabricate in panels than other screenings. It is lighter, and is claimed to give a tighter, more taut span which does not scar easily.

Builders are using the coated screening in new houses priced as low as $10,000. Elmer Findley, Florida screening contractor who pioneered in the development, says screened patios and porches are being added to houses for as little as $250 cost to the builder. His own business to builders in the Miami area has skyrocketed "30 times over" in the last two years.

The boom is not confined to Florida, Findley adds. He is even shipping quantities of the screening, which he buys in large lots at rock-bottom cost, as far north as New York.

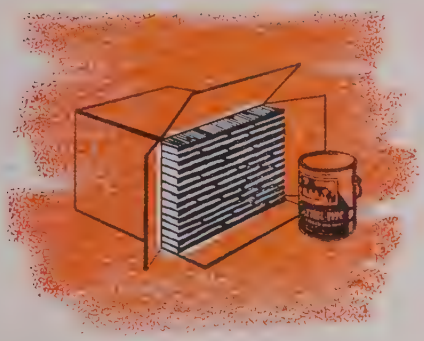


Enclosed swimming pool *illustrates use of vinyl-covered screening which costs builders 60 to 65¢ per sq. ft. installed. For roof, screening can span 20′ without support, 30′ with queen post trusses.*

why you'll be far ahead with

Creo-Dipt OPTIONAL KOLOR PLAN

on all jobs calling for red cedar shingles and shakes



THE PLAN . . . IN A NUTSHELL

Under the Optional Kolor Plan, red cedar Pryme-Shakes or Shingles, factory-primed (gray), are sold as a unit with Fynal-Kote, a heavy-bodied linseed oil base finish coating. Formulated for uniform, one-coat coverage, Fynal-Kote is available in 22 modern colors.



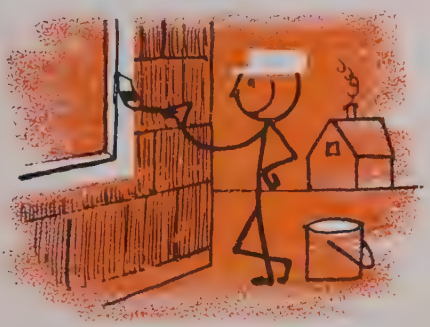
PLEASES "STYLE-CONSCIOUS" HOME BUYERS

With the Optional Kolor Plan expanded to include the entire Creo-Dipt line, you can offer your customers an unequalled selection of 8 styles of red cedar shingles and shakes in 22 attractive pastel and deep tone colors. Every architectural need can be met with ease.



NO DELAYS ALONG THE WAY

Although Pryme-Shakes (or Pryme-Shingles) and Fynal-Kote are sold together, Fynal-Kote colors can be requisitioned *after* shakes are delivered. Construction can proceed without waiting for sidewall color selection. With top quality materials assured, work moves smoothly from start to finish.



NEATNESS INSURED WITHOUT "EXTRA EFFORT"

Since Fynal-Kote conceals construction blemishes, shake application and trim painting can be speeded. Color matching problems and touch-up time are both eliminated. In most cases, these savings in labor and materials more than cover the costs of applying Fynal-Kote.



WINS QUICK APPROVAL

The Optional Kolor Plan provides the sure way to harmonious sidewall beauty. When your customer sees the results, he will be quick to give you an unqualified "OK". So, too, will the FHA, for the Optional Kolor Plan fulfills 2-coat minimum requirements.



NO "LEFT-OVERS" TO WHITTLE DOWN PROFITS

With Pryme-Shakes and Shingles furnished factory-primed in gray, on-the-job inventories are cut 75% to 90%. By the same token, you won't be loaded with an odd assortment of shakes prestained in a variety of colors after each job is completed. Balance can be used on the next job.

PRYME-SHAKE STARTER STRIPS

New, easy way of applying the first course

(Sold under the Optional Kolor Plan)



All-in-one units consisting of 18" processed red cedar Pryme-Shakes, backer board and wood strip, Pryme-Shake Starter Strips are the perfect choice for the first course wherever scored red cedar shakes are used. They're big, easy to handle and easy to line up. *They're permanently assembled, too!* Heavy duty *stainless* steel staples go all the way through shakes, backer section and wood strip to form a permanent lock.

mail this coupon for FREE literature

CREO-DIPT COMPANY, INC.
North Tonawanda, N. Y.

Mail complete information to us, without obligation:

☐ Optional Kolor Plan ☐ Pryme-Shake Starter Strips

Name _____

Title _____

Firm _____

City _____ Zone _____

State _____



PROVIDES PERMANENT PROTECTION HERE!

The time to permanently "eliminate" destructive moisture is in the original construction with the use of Sealtight Premoulded Membrane . . . the industries only TRUE vapor seal. All other methods are merely temporary stop-gaps. Ideal for all types of construction . . . commercial, industrial and residential. The installation of Premoulded Membrane not only gives you a warm, dry, more liveable home but one that is also more saleable in the future.

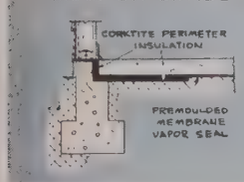
When specifying a vapor seal material be sure it meets these Sealtight standards of quality . . . permeance rating of only .0066 grains per square foot . . . resistant to rot, mold and termites . . . expandable . . . quick and easy to install . . . only Premoulded Membrane meets them all.

SEALTIGHT Premoulded Membrane
TRADE MARK

wherever good design requires a TRUE VAPOR SEAL!

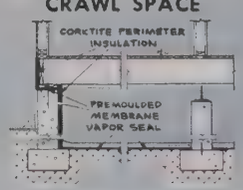
IDEAL FOR ALL TYPES OF CONSTRUCTION

SLAB-ON-GRADE



This illustration shows how the installation of Premoulded Membrane and Corktite completely isolates the slab and superstructure from soil moisture.

CRAWL SPACE



The proper installation of Premoulded Membrane and Corktite removes all danger of condensation and oxidation of metal installations in the crawl space area . . . eliminates the need for ventilation.

BASEMENT



The proper installation of Premoulded Membrane to the exterior of the basement walls as well as beneath the floor slab insures a permanently warm and dry basement.



ARCHITECTS, BUILDERS, DEALERS . . .

WRITE TODAY for complete information that tells you where, why and how to use Sealtight Premoulded Membrane, the only true vapor seal and Corktite, the resilient, impermeable perimeter insulation.

"Guardian of the Home"



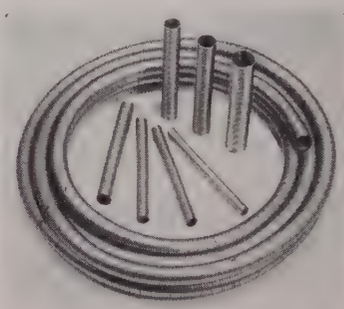
W. R. MEADOWS, INC.

10 KIMBALL ST. • ELGIN, ILLINOIS

for further details check numbered coupon p. 292



A. Shure-Set fastening tool has a base plate designed to level the tool at right angles to the work and protects the surface from mis-aimed hammer blows. Neoprene hand grip is comfortable, keeps hand from sliding. Top guard protects fingers. Illustration above shows how to use. With it, you can seat a specially-constructed fastener into a variety of materials—concrete, block, cinder block, brick, steel. $27.95 price includes hand hold, finger guard and attachments for several standard size fasteners. Ramset Fastening System, Olin Mathieson Chemical Corp., New York 22, N.Y.



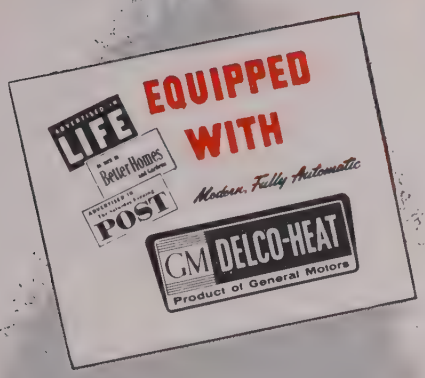
B. Lightweight Titeflex 500 tubing is manufactured with external ridges that make tube resistant to crushing and enable it to be self-supporting for long lengths so it can be mounted in concrete forms with few supports. You can form tube by hand to complex layouts and it stays put in bent shape, is easily cut with a knife. Sizes shown are ⅞", 1", 1⅛", 1½" and 2" ID. Tube's corrosion-resistance makes it a good weather-protective duct for exposed wiring or piping lines. Price not given. Titeflex, Inc., Springfield, Mass.



C. Grand Screen houses add outdoor rooms, open up a house's space. All-aluminum prefabricated screen house is 9' x 12', can be a porch, a playroom, a bedroom. Insects can't come through the fine mesh, heavy canvas waterproof roof keeps out sun and rain, eaves on roof give extra protection. Entrance door slides to open, locks from either side of the screen house. Accessories are available. Grand Sheet Metal Products Co., Melrose Park, Ill.

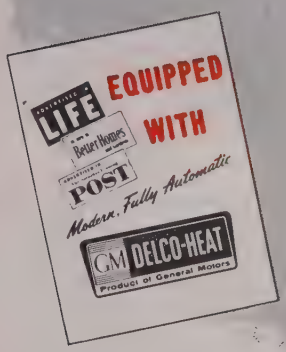
continued on p. 202

EXTRA SALES...FASTER SALES WITH GM DELCO-HEAT MODEL HOME MERCHANDISING!

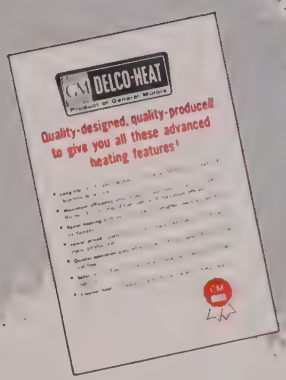


OUTDOOR TRACT SIGN placed in yard or on house as attention-getter at front door.





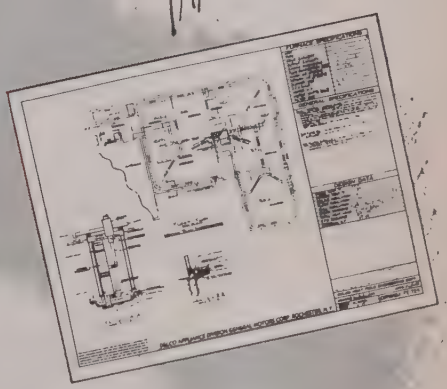
INTERIOR DISPLAY CARD easel-mounted to use on kitchen counters.



FURNACE TAG to acquaint prospects with outstanding features of your heating installation.



THERMOSTAT CARD emphasizes automatic heat features and quality heating equipment.



GM DELCO ENGINEERED HEATING LAYOUT displayed to impress prospects with thoroughness of heating design.

Your model homes displaying the General Motors Delco-Heat Model Home Merchandising material help sell your homes faster, easier, at more profit! In today's competitive buyers' market, take advantage of the extra sales impact of the Delco-Heat Home Selling Program. Your home prospects are multiplied many times over by hard-selling Delco-Heat newspaper advertising in *your local papers* . . . featuring *your model homes! Plus,* extra selling by quality merchandising displays at the model homes . . . by the prestige and assurance of General Motors Delco-Heat *engineered* heating systems . . . and by tie-in with national consumer advertising in LIFE, BETTER HOMES & GARDENS, and SATURDAY EVENING POST. Get this exclusive sales help on *your* home projects now!

LIFE Better Homes and Gardens The Saturday Evening POST

Now Selling More Homes all over America!

MAIL THIS COUPON TODAY!

Home Builder Department HH
Delco Appliance Division
General Motors Corporation
Rochester 1, New York

Please have your local Delco-Heat factory sales representative give me complete information on the General Motors Delco-Heat Home Selling Program.

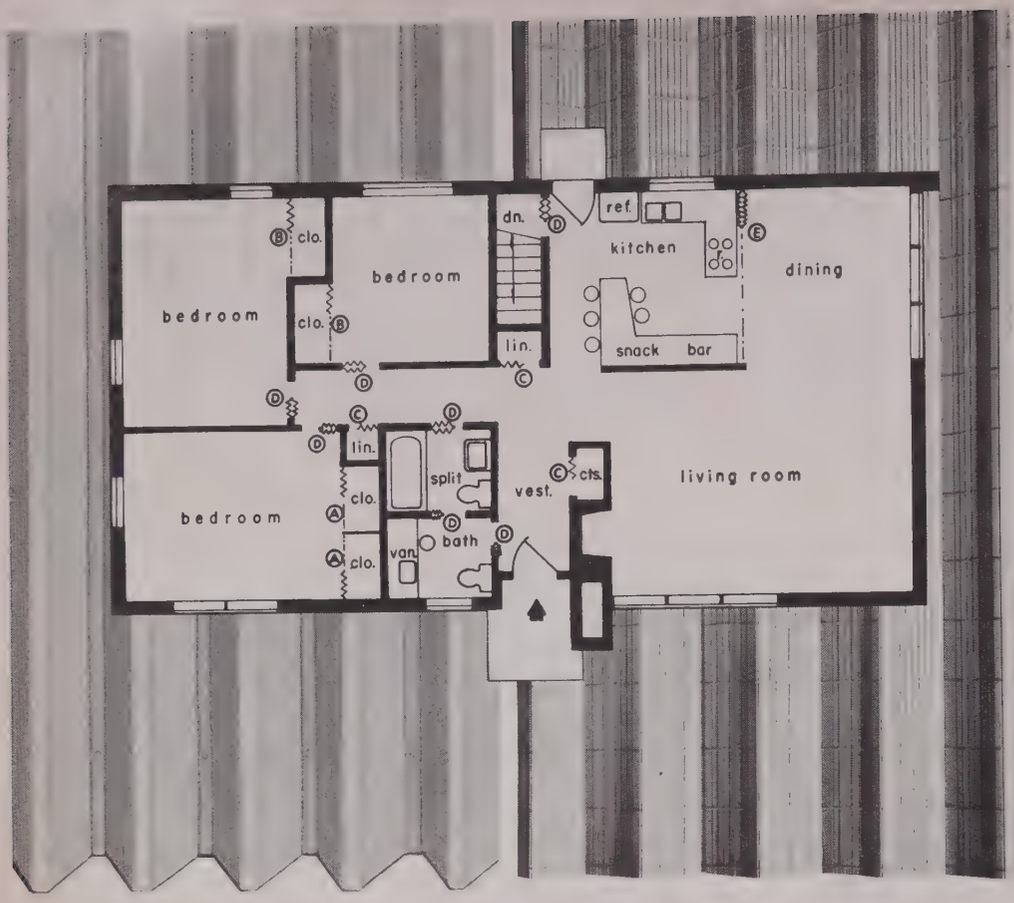
Name of Builder.....

Address.....

City..... State.....

Approximate number of homes built per year.....

for further details check numbered coupon p. 292



Hufcor Laminated Accordion Door

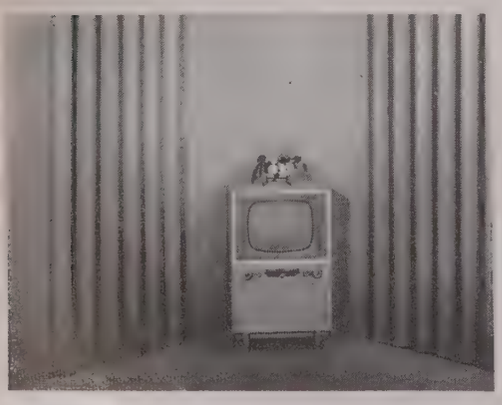
Fashionfold Basswood Folding Door

How to Save Over $200 per House

New Hough Door Construction System Saves and Sells

Actual on-the-job cost comparisons including paint, trim, labor, etc. prove that you can save hundreds of dollars with the Hough Door Construction System. The secret; using both Hufcor and Ra-Tox Fashionfold doors instead of space-consuming swinging and sliding doors. The floor plan above is an actual illustration of the system. Seven Hufcor doors, one Hufcor room divider and seven Fashionfold doors were used for a net saving of $323.79. Find out now how this system works. Ask the Hough distributor in your area to help you make a cost analysis of your own floor plans, or—

Write today on your letterhead for details of the Hough folding door Construction System



Hufcor accordion doors with 5-ply semi-rigid laminated covers are built on the vertical pantograph principle. Designed to assure more sound reduction, these doors also have a trim-line architectural beauty and an inborn toughness that makes them the ideal folding wall or closure for kitchen, bedroom, bathroom and other openings.



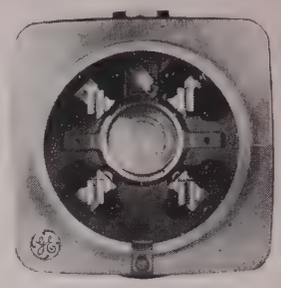
Ra-Tox Fashionfold basswood slat doors are distinctively designed to add "plusses" to the decor of your homes. They save wall and floor space, provide full accessibility, provide needed closet ventilation, are easy to operate and withstand a tremendous amount of abuse. Ideal for closets, utility areas, room dividers.

pronounced HUFF

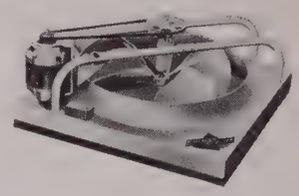
HOUGH

MANUFACTURING CORPORATION

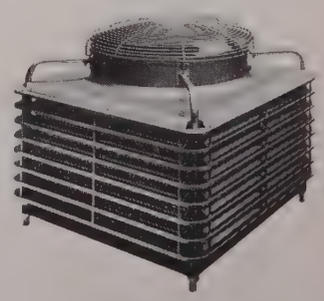
1021 South Jackson Street, Janesville, Wisconsin



a. Square socket can be used with all watt-hour meters with a capacity of 100 amperes or less. Symmetrical location of terminals in the S-1 makes wiring easy. Conversion is simple, since each individual terminal block assembly is held by two screws. To convert from vertical to horizontal, unscrew blocks, remount 90° from initial position. Four-terminal without sealing ring, $2.96; with slip-lock sealing ring, $3.11; with snap-action sealing ring, $3.31. General Electric Co., Somersworth, N. H.



b. Vertical discharge attic fan combines ease of installation with low cost. Fan rests on framed ceiling opening, eliminating need of plenum chamber. Balanced, deep-pitch blades deliver large volume of air at low operating speed. Ball bearings in fan shaft and motor end shields are sealed in, have lifetime lubrication. Fan rests on rubber cushion which absorbs sound, vibration. 24" model about $76.55; 30" model, $85.30. Both have ¼ hp motors. Emerson Electric Mfg. Co., St. Louis, Mo.



c. Compressor-condenser unit of Janitrol cooling system is factory assembled and wired. Louvered construction protects against elements. Air flow pattern gives maximum cooling capacity with minimum power consumption. Unit gives uninterrupted performance with outside temperatures up to 125°. Weather-resistant construction is designed for outdoor mounting. Evaporator coil mounts easily in outlet air duct, above or below furnace, is in a compact, all-steel cabinet. Surface Combustion Corp., Janitrol Heating & Air Conditioning Div., Columbus, Ohio.

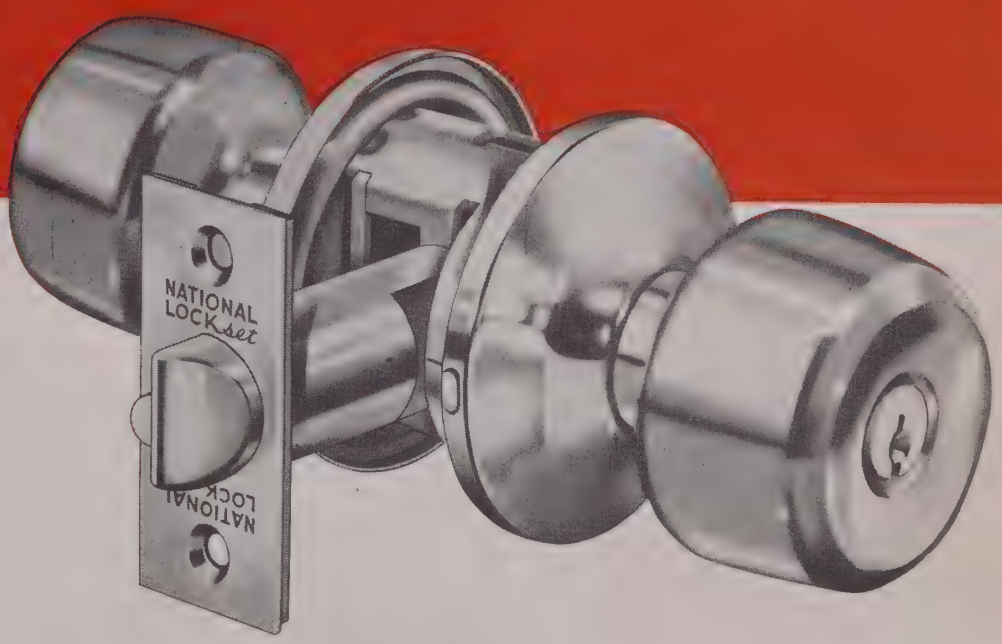
continued on p. 206

NATIONAL LOCKset

Patent Applied For

...quickly installed





Another Important Reason Why It's...

AMERICA'S OUTSTANDING LOCKSET VALUE

Only 7 simple steps are required to install NATIONAL LOCKset. Such special features as easy slot-engagement of lock and latch . . . clamp plate assembly with key-slot design . . . snap-on rose . . . positive spring-retaining pin to hold knob . . . save installation time at every step. And, too, National Lock's complete line of installation aids, including special boring jig, bit and mortise marker, cut on-the-job overhead that every builder appreciates. • Remember, NATIONAL LOCKset's *distinctive styling, precision engineering, troublefree performance* and *fast, easy installation* are vital sales points that are striking home with builders, architects and owners from coast to coast.

Order It With Confidence

Specify It With Pride

NATIONAL LOCK COMPANY

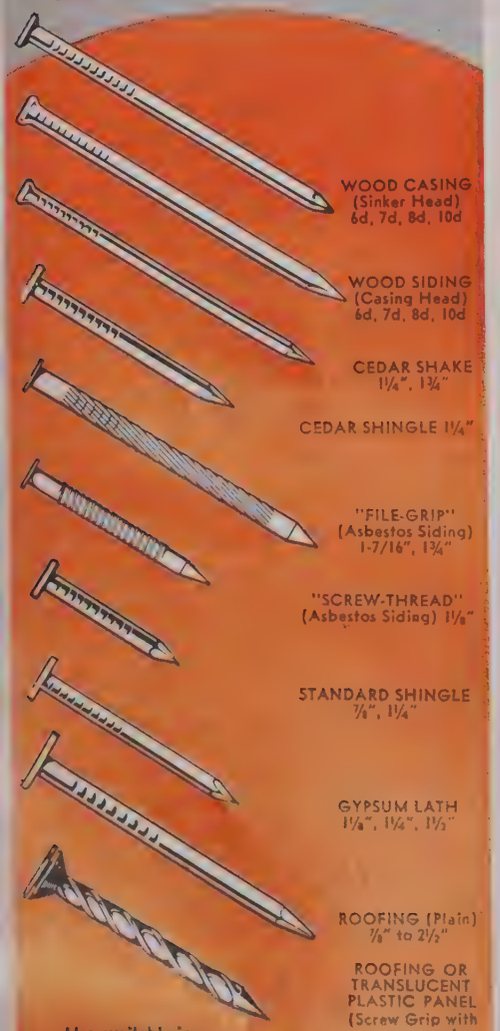
Rockford, Illinois • Merchant Sales Division

BUILD PROFITS and GOODWILL

Use nichols NEVER-STAIN®

RUSTPROOF ALUMINUM Nails

- RUSTPROOF — will not stain or streak siding and trim
- STRONG — made of high-temper aluminum alloy
- PACKAGED FOR THE JOB — in smart color-coded dust-proof pull-string containers having complete coverage tables.
- ECONOMICAL — eliminate countersinking and puttying
- FHA APPROVED

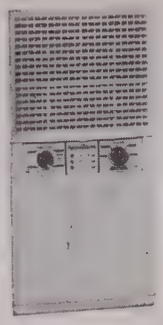


Also available in 50 lb. cartons

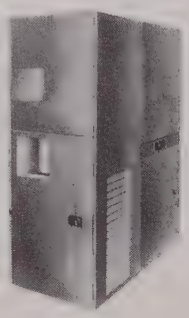
Write for free samples and descriptive literature

nichols
WIRE & ALUMINUM CO.
DAVENPORT, IOWA
World's Largest Manufacturer of Aluminum Nails

for further details check numbered coupon p. 202



d. Casement air conditioner will fit any casement window. Unit does not protrude outside and you can open and close window with air conditioner in position. Among the features, directional cooling, thermostatic control, two fan speeds, ventilation, exhaust and high power factor. Control panel is easy to operate, easy to read. Case is handsomely styled, does not conflict with room interiors. ¾ hp unit about $349.95. Unit is manufactured by Emerson Electric Mfg. Co., St. Louis, Mo.



e. Gas-operated year-round air conditioner both heats and cools, can be installed ready for use in one hour. 3-ton model takes up only 10.4 sq. ft., has 96,000 Btu per hr. output heating capacity, delivers a maximum of 1,600 cu.ft. per min. on cooling cycle with the built-in by-pass open. Single coil provides summer cooling, winter heating, utilizes the same or single modern absorption refrigerant unit. Price not given for Sun Valley unit. Manufactured by Servel, Inc., Evansville, Ind.



f. Gas Hi-Boy furnace saves space by installing flush to the wall in closets or utility rooms. Standard model GH 125 has on-off fire with a belt-drive motor, an input of 125,000 Btu per hour. Furnace is shipped assembled, with built-in draft diverter and all controls wired and installed. Model has thermostat, combination blower and limit control with summer circulation switch built-in. $229.50 for natural gas, $242.50 for manufactured gas. Perfection Ind., Cleveland 4, Ohio.

continued on p. 210

Elastizell®

. . . the perfect answer to the residential slab-on-grade problem!



Parquet wood flooring on Elastizell-type concrete slab

Concrete made with this material is . . .

- HIGHLY MOISTURE-RESISTANT

Elastizell-type slab is dry. On it can be used any kind of floor covering — cork or rubber tile, linoleum, parquet-type wood flooring, wall-to-wall carpeting!

- SELF-INSULATING

Elastizell-type slab, with its "warm-to-the-touch" feel, permits maximum performance of whatever the heating system. Hence, floor-to-ceiling living comfort!

AMONG OTHER USES OF ELASTIZELL-TYPE CONCRETE . . .

- as light weight, easy-to-handle floor fills in multi-storied construction.
- as light weight, insulating roof fills.
- as light weight structural members.
- as insulation for underground pipe lines.
- as precast slabs and panels.



Write, wire or 'phone . . .

ELASTIZELL CORPORATION OF AMERICA
158 FLETCHER STREET • ALPENA, MICHIGAN
'PHONE 1080

designed for builders



RCA Whirlpool

NEW...ALL NEW
GAS AND ELECTRIC
BUILT-IN RANGES

New RCA WHIRLPOOL built-in gas and electric ranges give your homes the "distinctive difference" that clinches sales much faster. Here is the more convenient cooking . . . the eye-catching beauty . . . women demand in their new homes. For everything is placed at easy "stand-up" work level. Even the cooking areas, using either 2-burner or 4-burner units, can be located *exactly* where used most to save steps. And the smart styling — in copper-tone, stainless steel or white porcelain finishes — blends with every decorating style.

New RCA WHIRLPOOL built-in ranges were designed to your requirements . . . to provide the automatic cooking performance, and modern look that help sell your homes.

RCA Whirlpool

NEW...ALL NEW
FULLY-AUTOMATIC
WASHER and DRYER

Now . . . the most famous name in home laundering gives you a new sales plus for your new homes. RCA WHIRLPOOL Custom "24" washer and dryer (gas or electric) are designed, styled and engineered *exclusively for builders.*

They are big, family-size units that fit *every* size home. Both washer and dryer require a space less than 49" wide. For really limited space, they can even be made portable. And, you have the outstanding quality laundering features women want . . . Suds-Miser®, Seven Rinses, 2-Temp water selection, safe all-fabric washing and drying.

These new RCA WHIRLPOOL Custom "24" washers and dryers provide the extra margin of value that makes "For Sale" become "Sold" easier and quicker.



NEW BUILDER PURCHASING PLAN

Whirlpool-Seeger makes it economical and easy to add the sales power of RCA WHIRLPOOL home appliances to *all* your new homes. Contact your RCA WHIRLPOOL distributor now for complete details.

RCA WHIRLPOOL HOME APPLIANCES are products of
WHIRLPOOL-SEEGER CORPORATION, St. Joseph, Michigan
WASHERS, DRYERS, IRONERS, FREEZERS, RANGES,
AIR CONDITIONERS, DEHUMIDIFIERS

Use of trademarks and RCA authorized by trademark owner Radio Corporation of America

LIVE BETTER ELECTRICALLY

It's easier to sell homes equipped with RCA WHIRLPOOL Appliances

for further details check numbered coupon p. 292

needs less care

...and provides lifetime comfort underfoot!

Amtico PERMALIFE VINYL FLOORING

All-vinyl . . . with beautiful colors going through-and-through, Amtico Vinyl Flooring is the most complete line and offers unlimited design possibilities . . . takes hardest wear for years.

America's most luxurious flooring, Amtico Rubber Flooring is the quality leader that gives your customers lifetime economy, rich beauty, cushioned comfort and fire-resistance.

Amtico RUBBER FLOORING

Also makers of Amtico Plastex Rubber Flooring

World's Largest Producer of Rubber and Vinyl Floorings

AMERICAN BILTRITE RUBBER COMPANY

TRENTON 2, N. J.

New York Office: 461 Fourth Avenue

In Canada—American Biltrite Rubber Co. (Canada) Ltd., Sherbrooke, Quebec

See SWEET'S FILE, Architectural, for specifications and installation data, or mail coupon below:

AMTICO, Dept. HH-3, Trenton 2, N. J.

Gentlemen:

Please send me free complete set of Samples and detailed information about Amtico Floorings.

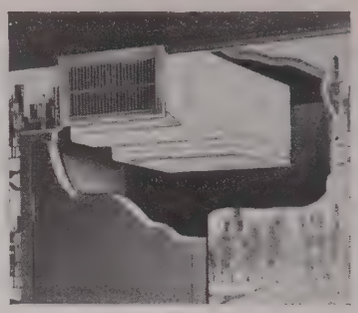
Name.....

Firm.....

Address.....

City.....Zone.....State.....

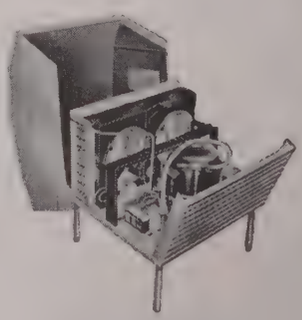
(Please attach coupon to your business card or letterhead)



g. Recold air conditioner gives you individual room control with the advantages of a central system. Unit is available for direct expansion systems or chilled and hot water systems. It cools, heats, dehumidifies and filters. It can fit into an area above a closet shelf, requires no ducts or sheet metal work. Outlet fits between studs. Photo above shows how RE is installed. Note you don't have to cut studs, do any framing. Prices from $171.80 to $233.10. Refrigeration Engineering, Inc., Los Angeles 22, Calif.



h. Frigidaire room air conditioner—Deluxe—comes in six models: two ¾ hp, two 1 hp (one with reverse cycle operation) and two 1½ hp. All have automatic thermostat temperature control and exhaust systems, all contain new single reciprocating type refrigeration compressor. The ½ hp units are designed for casement windows, come equipped with sealed rotary compressors. Fiberglas throwaway type filters are used on all units. Prices from $334.95 to $429.95. Frigidaire Div., General Motors Corp., Dayton 1, Ohio.



i. Winkler condensing unit is heart of a remote air conditioning system. Install it outdoors beside an exterior wall, in carport or garage, on sun deck. It is used with Winkler Evaporator Cooling Coil in all types of installations. Condensing unit compresses refrigerant gas, converts it to liquid before it enters evaporator where it is vaporized, picking up heat from space to be cooled and reducing humidity. Size range makes the equipment practical for almost any type installation. Stewart-Warner Corp., Lebanon, Ind.

continued on p. 214

$500 WORTH OF LIGHTING FIXTURES IN THIS HOME...

The BUILDERS



Tipton Flory









...AND THEY'RE SELLING MORE HOMES JUST LIKE IT, COMPLETE WITH ALL 43 MOE LIGHT FIXTURES

Major selling feature in this model home was the use of nationally advertised Moe Light fixtures for practical utility and decorative beauty throughout the house. During the first two weeks at least a dozen duplicate homes were sold. Based upon response of delighted prospects and positive sales results, the building partners, Mr. Flory and Mr. Tipton, will continue to feature Moe Lights in their very successful project in St. Petersburg, Florida.

THOMAS INDUSTRIES INC. MOE Light DIVISION Originators of Inspiration-Lighting

Executive Offices—410 S. 3rd St., Louisville 2, Ky.
In Canada: 1401 The Queensway, Toronto 14, Ontario, Canada

MOE LIGHT can do the same for you ...Send for your free copy of the big MOE LIGHT *Inspiration-Lighting Catalog* today.

THOMAS INDUSTRIES INC.
MOE LIGHT DIVISION, Dept. HH-6
410 S. 3rd Street, Louisville 2, Ky.

Please send me the Moe Light *Inspiration-Lighting* Catalog so that I can see the fixtures Flory-Tipton used.

NAME_____

COMPANY NAME_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

for further details check numbered coupon p. 232

A Look of Luxury...

BUT PRICED TO SELL

THE VAST MIDDLE-INCOME MARKET!



The Monterey — NAHB and Parents Magazine Award winner. 3-bedroom 1003 sq. ft.

Allen Homes offer you a full line of distinctively designed homes, profitably priced!

DESIGNED FOR ALLEN HOMES *by* Dudley H. Hamm A. I. A.



The Oakland — House and Home, NAHB Award winner



The Van Nuys — 1328 sq. ft. 3-bedroom

You needn't hesitate to switch to ALLEN Homes . . . for with Allen you have a full line of the most outstanding designs available! With an emphasis on *quality* . . . you'll find feature after feature built into every model to make them more sales-appealing. We urge you to examine our line for yourself — price them out — so that you will learn first hand how ALLEN Homes can fit into your plans for a more profitable future!

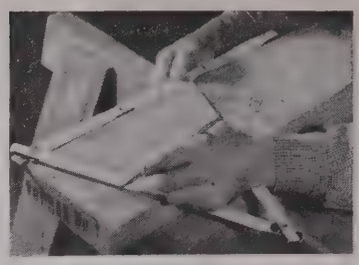
Write, wire or phone TODAY!

ALLEN homes

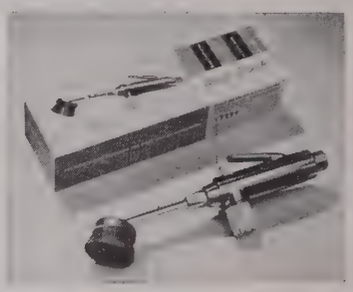
* CUSTOM FLEXIBILITY * PRODUCTION LINE ECONOMY

Allen Industries, Inc. • Phone KEnmore 4917

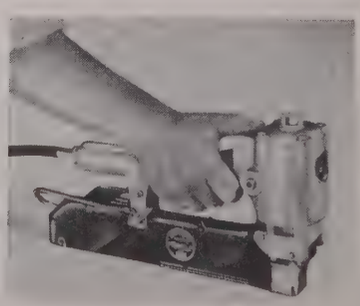
P. O. Box 2497, Station C, Fort Wayne, Indiana



j. Six-foot folding wood rule has special markings on the reverse side to make it easy to lay out rafters (common, hip, valley and jack) with speed, accuracy. Master Framing Rule works by manipulating angular folds to form triangles, bases of which are held along the side or edge of lumber. Adjustment for each triangle is made by notching in metal end of rule over correct bull's-eye on reverse side and holding adjustment under the thumb while the angular cut is being marked. $2.95. Harry W. Smith, Inc., New York 17, N.Y.



k. Dish-Quik is an efficient extra for a new house display. Spray-brush head scours dishes, pots and pans. Water is triggered on and off by means of a lever built into handle. By pressing red button on handle, you can feed detergent from plastic cup to spray as you need it; button release clears water for rinse purposes. As replacement package, unit costs $9.95. Installed on new sinks as part of original equipment, price determined by package. The Dish-Quik Co., Div. of Modern Faucet Mfg. Co., Los Angeles 1, Calif.



l. Push-button Spotnailer has a pneumatic attachment on a standard mallet-drive unit that speedily fastens hardboard or plywood paneling, sidewall sheathing, lath, etc. since you can hold material with one hand, operate machine with other. Spotnailer magazine holds as many as 200 fasteners, reloading is simple, fast. High velocity principle means you can drive a variety of fasteners including heavy gauge staples and sash pins up to 1¼" 1. MHL model about $135. Spotnails, Evanston, Ill.

continued on p. 220

What sells a House?



LOCATION? FINANCING? DESIGN? PLAN?

YES... plus the *Lift to Living* extras that make a house a home

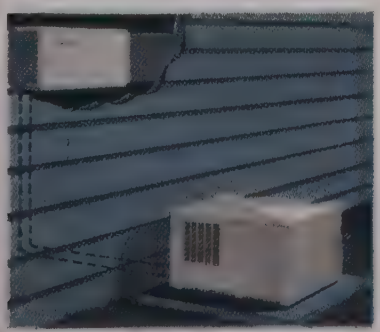
These extras are the brand name accessories your customers know and want. Such things as Frigidaire full-home air conditioning . . . summer and winter for year 'round comfort.

Air Conditioning? We'll agree air conditioning alone may not sell a house. But it can help you sell more homes in 1956 more quickly, more easily! What's more, this valuable experience will guarantee you the ability and local reputation to *keep pace* with residential air conditioning, which conservative estimates indicate will be included in most new homes in five years.

And that's why Frigidaire is adding to its 1956 line many newly-designed and field-tested air conditioning units. With these, Frigidaire offers you a complete, nationally advertised line with a name consumers know and trust.

Your Frigidaire air conditioning dealer will be glad to work with you in planning heating and air conditioning for your new homes . . . in promoting and selling them . . . and in providing a factory-trained service organization that will assure homeowners the unequaled satisfaction these Frigidaire products provide. See the Frigidaire dealer or distributor nearest you or write FRIGIDAIRE DIVISION, *General Motors Corporation,* Dayton 1, Ohio.

FRIGIDAIRE CONDITIONERS
adaptable to variety of installations

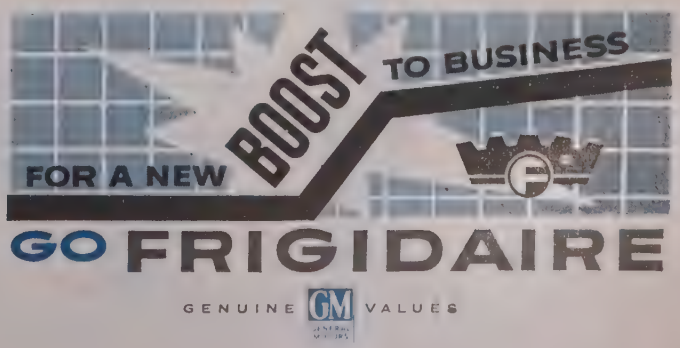


REMOTE

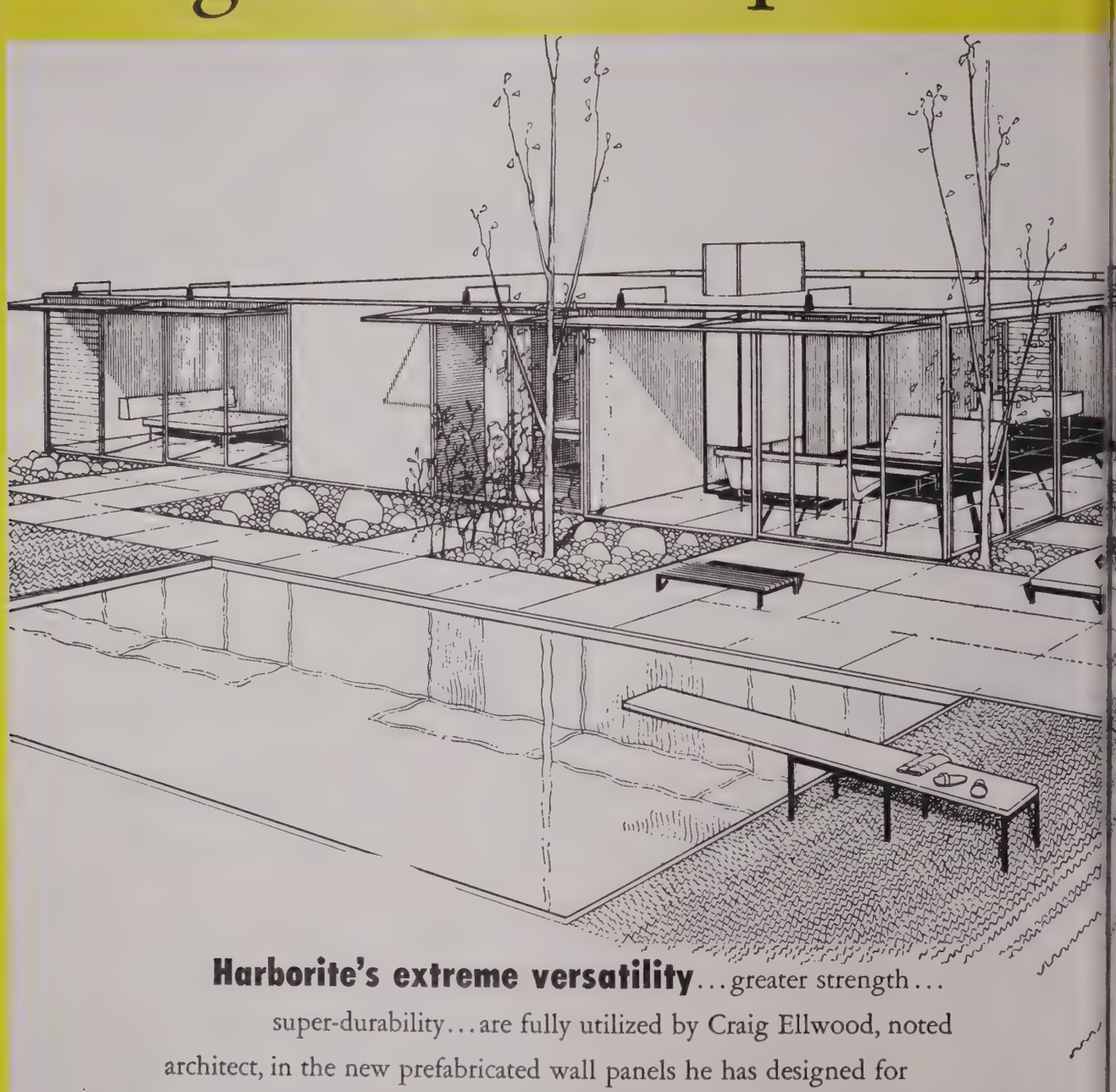


YEAR 'ROUND

Frigidaire has a complete line of air-cooled and water-cooled residential units for add-on, combination, self-contained and remote-type installations.



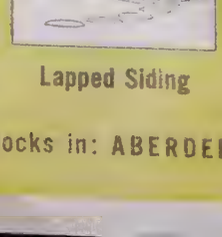
Craig Ellwood specifies



Harborite's extreme versatility... greater strength... super-durability... are fully utilized by Craig Ellwood, noted architect, in the new prefabricated wall panels he has designed for Case Study House 18. Throughout the house, all walls will have both interior and exterior facings of Harborite. The diagram at right shows the structural details of Ellwood's patented design.

© 1956
HARBOR
PLYWOOD CORPORATION
Aberdeen, Wash.

HARBORITE PROVIDES NEW ADVANTAGES IN CONVENTIONAL APPLICATIONS, TOO


Lapped Siding


Soffits & Gables


Interior Paneling

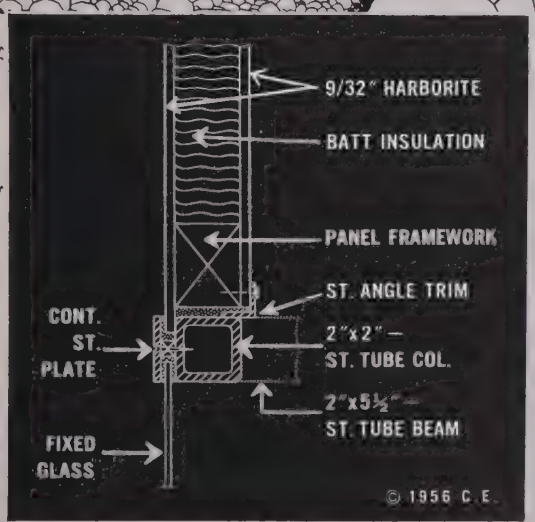
Sales Offices and Warehouse Stocks in: ABERDEEN • ATLANTA • CHICAGO • CINCINNATI • HOUSTON •

HARBORITE®

...The miracle overlaid fir plywood!

Case Study House 18 uses Harborite for both facings of pre-fab panels in amazing new dry-wall construction...





The Case Study House Program is sponsored by the magazine ARTS & ARCHITECTURE

This is

HARBORITE

SUPER-RESISTANT TO WEAR, WEATHER AND WATER!

A super-strong, lightweight structural panel... finest exterior grade plywood PLUS a tough, abrasion-resistant overlaid facing...with weather-proof, split-proof, check-proof qualities...ideal for a multitude of uses in both pre-fab and conventional construction.

BUILD IT BETTER! Harborite is stronger than steel ...impervious to moisture and weather...defies even severe extremes of tropical heat and arctic cold! Users report swelling, shrinking, buckling, warping and grain-raise are virtually eliminated! Harborite's hard, smooth, grainless face takes paint better...holds it years longer!

SAVE MONEY! These large, lightweight panels are easy to handle...easy to work...with standard tools and techniques...Harborite cuts labor and paint costs to the bone!

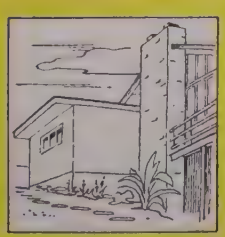
Available in standard and special sizes and thicknesses...also special sizes in lapped and grooved siding.

NOW COMPETITIVE IN PRICE WITH FINEST MARINE PLYWOOD

See your lumber dealer.



Cabinet Work



Exterior Walls

mail this coupon today

Box 6, HH

HARBOR PLYWOOD CORPORATION
Aberdeen, Washington

Please send more information about Harborite.

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

FIRM _____

INDIANAPOLIS • JACKSONVILLE • LOS ANGELES • SAN FRANCISCO • SEATTLE • TAMPA, other major cities

Here's how the floor can help

make one room

The easiest, and often the most dramatic, way to give a room a 2-in-1 feeling is to change the color of the floor in each of the areas. Here, Armstrong Excelon Tile was used, but this effect may be achieved with any type of Armstrong resilient flooring. Thus, expensive partitions or room dividers can be eliminated.



A merchandising idea
from the Armstrong
Architectural-Builder Service
to help you sell houses faster
and more profitably

seem like two

Few things impress prospective buyers so much as a house that offers more glamour than other houses they've seen—especially when they're priced the same. One way to build this extra glamour into your houses without increasing costs is to make use of the great color and design flexibility of resilient floors.

There's almost no limit to the exciting effects that can be created with resilient floors to add extra appeal to your houses. A most favorable impression can be made by using the floor to outline the areas of an open plan house—to make one room seem like two.

The photographs on these pages show some of the ways in which resilient floors have been used to create two or more distinct areas. The effect is achieved merely by the use of different colors or designs of the same flooring material. There is none of the loss of spaciousness that a partition would involve—and, of course, there is no added construction cost.

Your flooring contractor can help you

With his knowledge of the floor colors and designs that are most popular with homemakers in your area, your flooring contractor can help you select effective color combinations. He can show you many ways in which Armstrong Floors can be used to give house areas a two-rooms-in-one feeling.

Resilient floors meet modern living requirements

When you feature Armstrong Floors in your houses, you add far more than eye appeal. These floors provide the durability and easy cleaning that home buyers want for today's casual living and entertaining. You give your houses extra prestige, too, when you feature Armstrong Floors. Thirty-nine years of consistent advertising in the magazines that influence your prospects have made Armstrong the best known name in floors. Home buyers associate the Armstrong name with extra quality.

Free design and decorating service available

The Armstrong Bureau of Interior Decoration will be glad to help you or your color consultant create exclusive floor designs and color schemes for your next model home. For this service or special merchandising assistance to help sell your houses faster and more profitably, get in touch with the Architectural-Builder Consultant in the Armstrong Office nearest you or write direct to Armstrong Cork Company, Floor Division, 1606 Sixth Street, Lancaster, Penna.

Armstrong

THE MODERN FASHION IN

FLOORS

LINOLEUM • PLASTIC CORLON® • EXCELON® VINYL-ASBESTOS TILE
CUSTOM CORLON PLASTIC TILE • RUBBER TILE
CORK TILE • ASPHALT TILE • LINOTILE®

An effective way to create one "room" within another is to outline one area with a contrasting border. In this home, it was accomplished by installing a row of straight-grain pink tiles in Armstrong Excelon Tile in a field of charcoal-and-pink Spatter tile in the same vinyl-asbestos flooring.



To convey a feeling of spaciousness, this floor was divided diagonally, using two colorings in Armstrong Rubber Tile. For all its distinctive appeal, a floor design like this costs little more than a floor with a single over-all pattern. Such ideas add glamour that can help sell homes faster.



for further details check numbered coupon p. 292

This ADMIRAL won't

RAIN SPOT



..with quick drying ARCO Alkyd House Paint

Most leading prefab manufacturers like Admiral Homes Inc. choose Arco. Never before has there been a paint for home exteriors like it.

- No danger of rain spotting should showers interrupt painting. Dirt, dust, leaves and bugs have little chance to adhere.
- Dries rapidly. May be recoated in only four hours.
- Resists moisture, mildew and other destructive elements.
- Flows on easily with no brush drag. Gives rapid and thorough coverage.
- Fade-resistant colors defy wind, rain and snow—keep that fresh new look for years.
- Available in many dramatic accent trims . . . also subdued background shades.

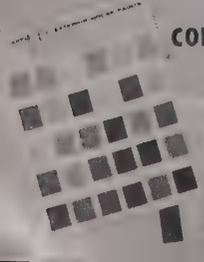
Send today for Arco's free color styling kit complete with 111 professionally styled color schemes and 30 swatches to guide you in your own color styling and plot development. Also don't forget to ask for information on amazing new Arco Interior Alkyd Ripple Texture Wall Finish —the ultimate in one coat protection over dry wall or plaster.

Admiral Homes Inc.
ARCHITECT-DESIGNED FACTORY-BUILT

ARCO PAINTS
Quality... SINCE 1881
Paints, Lacquers, Varnishes, Enamels, Protective Coatings
TRADE MARK

TESTED FIRST TO LAST!

FREE
COLOR STYLING KIT



THE ARCO COMPANY
7301 Bessemer Avenue • Cleveland 27, Ohio
Gentlemen:
☐ Please send Arco's new Color Styling Kit.
☐ Please send technical information on Arco Alkyd Ripple Texture Wall Finish.

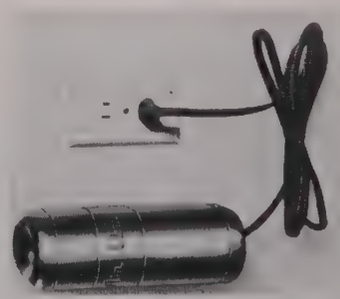
COMPANY_____
NAME_____
ADDRESS_____



m. Flexible calking compound seals cracks, joints and apertures even between dissimilar building materials like wood and brick or brick and steel. Manufacturer says "King Calk" provides a seal giving protection from leakage, drafts or heat loss indefinitely. Product is available in natural aluminum and pure white, comes packaged in standard 1/10 gal. cartridges with either plain end or flexible nozzle. Spouted cartridges are 45¢, non-spouted 40¢. 5-gal. can, $2.35. From E. & F. King & Co., Inc., Norwood, Mass.



n. D-P rope calk comes in 18′ and 90′ rolls for calking and sealing jobs wherever they are needed. It takes only a few seconds to calk or weatherstrip a window, and sealer can be removed for window cleaning, replaced for re-use as often as you like. Material remains soft and pliable, can be painted any color to match woodwork or trim, cuts easily and has high adhesion qualities, manufacturer says. 18′ rolls, 29¢ ea.; 90′ rolls, $1.20. The Dicks-Pontius Co., Dayton 3, Ohio.



o. Air Dri is an electric thermal convection unit that keeps relative humidity so low that mildew and mold cannot exist. Guaranteed for five years, it needs no attention after you hang it on the wall and plug cord into a standard outlet. Depressed holes at top and bottom of metal housing draw damp air into bottom, heat air and emit it out the top, creating continuous circulation. 3" x 3" x 9" sizes operate in rooms up to 160 cu. ft. $7.50 ea. Air Dri Assoc., St. Petersburg, Fla.

continued on p. 226

Don't Gamble

on your home building program



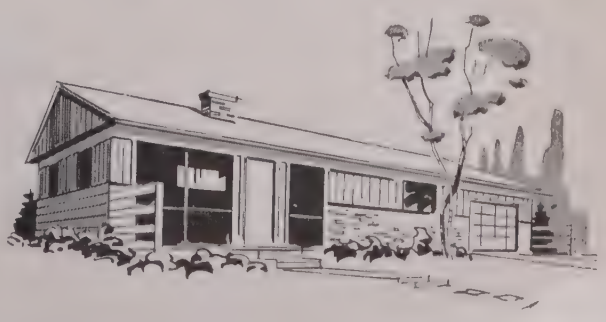
. . . team up with 21 years of know how . . . build P&H Homes!

Home building doesn't have to be risky as a crap game. You can cut risk to the bone, know costs *before* you begin, make your capital build two to three times more homes—at *greater* profits.

How? Team up with a pioneer in prefabrication. Build Harnischfeger P&H Homes—and take advantage of our 21 years' experience.

You'll follow a carefully-planned, *proven* success formula that has brought greater profits at less risk to Harnischfeger Dealer-Builders over the years: To begin with, your capital turns faster; there's less money tied up in inventory, development and payroll. Overhead and on-site costs are lower. And architect-styled P&H Homes offer a *quality* of craftsmanship and materials that builders recognize and buyers prefer. *You* offer a home value that outsells competition at every price from $10,000 to $20,000.

Finally, Harnischfeger offers you *personalized* field counsel in planning, financing, merchandising and construction to make your whole program more efficient. Join the swing to safer, more profitable P&H Home building. Phone, wire or write for details *now:* **Harnischfeger Homes, Inc., Department HH-566, Port Washington, Wisconsin. Phone 611.**



HARNISCHFEGER HOMES, Inc.

QUALITY P&H HOMES

For 21 years, better value for the owner, better business for the builder





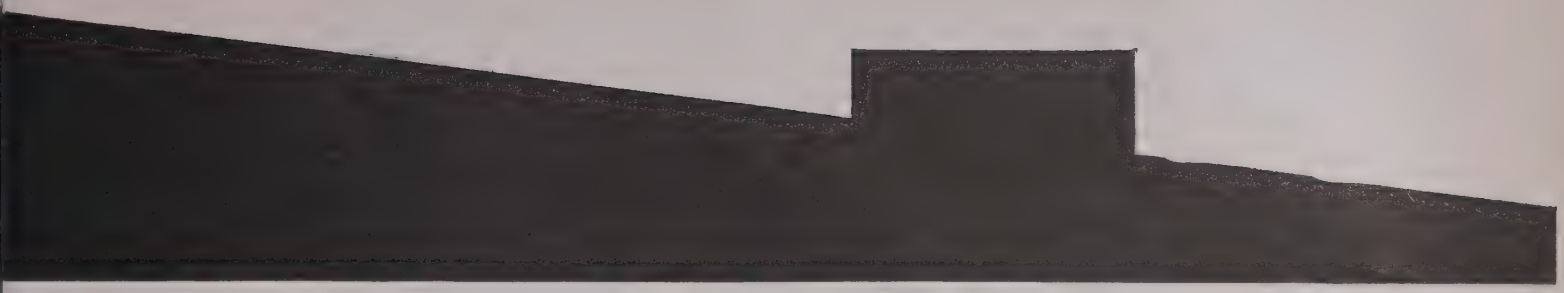


* it's enough to make your

... one new appliance can do it!

Sad, isn't it — when a modern home becomes electrically out-of-date through the addition of just *one* major appliance. Yet it happens every day all over the country!

Homeowners—more than 34,000,000 of them — have discovered how important it is to have a home wiring system that will stand up under the load of present-day electrical living. An adequate







homes grow old overnight!

service entrance, plenty of circuits and outlets and strong, copper wires all add up to a convenient, *comfortable* home.

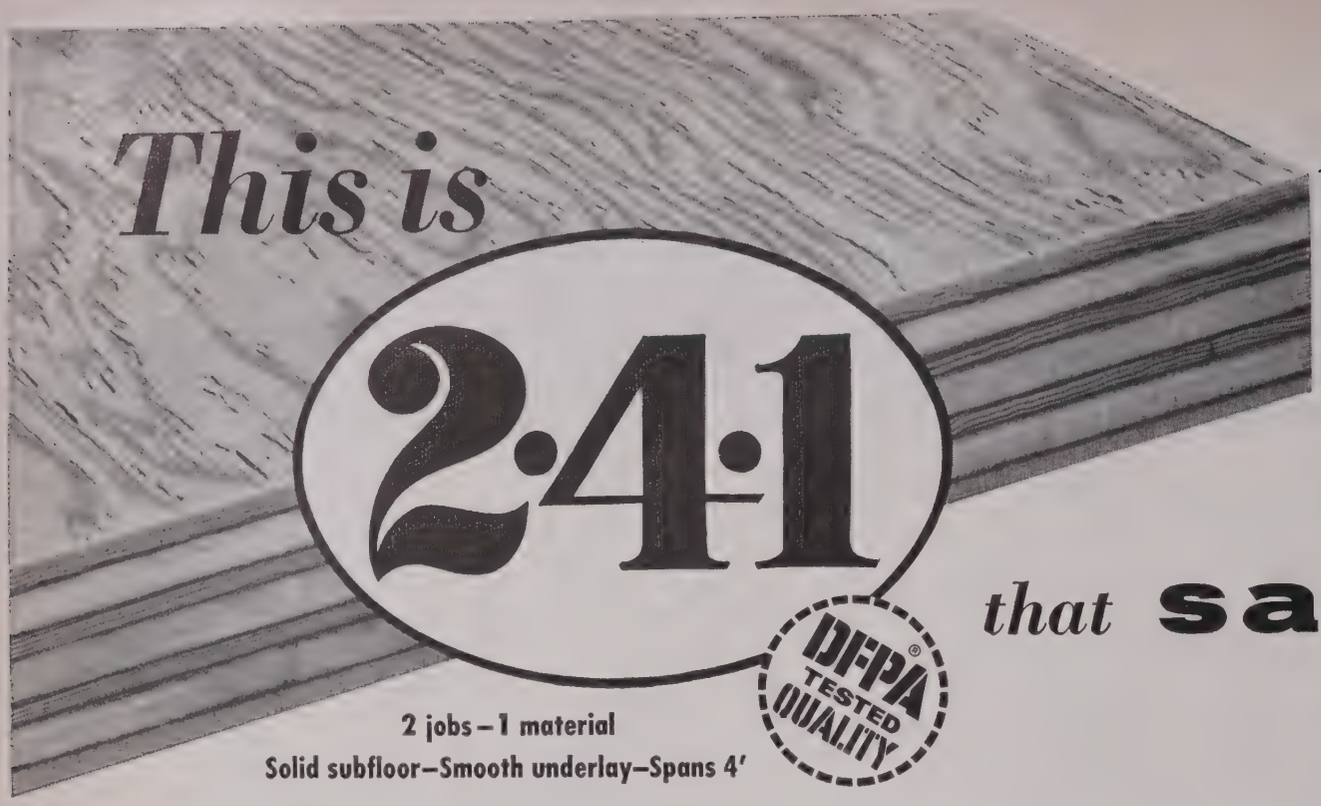
Plan your own homes for power — *and plenty of it.* Specify at least a 3-wire, 100-ampere service. Remember to include an abundance of outlets. Insist on an adequate number of circuits — plus *extra* circuits for the house "to grow on!"

Such planning not only makes your houses easier to sell — it also adds to your reputation as a builder of *quality* homes!

Free Home Wiring Wall Chart! Send today for handy wall chart showing typical home circuit loads. Use it as a check list when planning home systems. Write Kennecott Copper Corp., Dept. HH6, 161 E. 42nd St., New York 17, N.Y.

Kennecott Copper Corporation

Fabricating Subsidiaries: CHASE BRASS & COPPER CO. • KENNECOTT WIRE & CABLE CO.



...the

that **saves**



"Best construction we've ever used," reports Ken Larsen, president, Continental Construction Co.

COST STUDIES *conducted by Continental Construction Co., Seattle, show new "panel and girder" system (2·4·1 panels over supports 48" o.c.) cuts costs 7 ways over conventional "shiplap and joist" construction.*



Girders set flush with footings lower house about 12". Result: important savings in materials and labor plus attractive "low-lying" feeling.



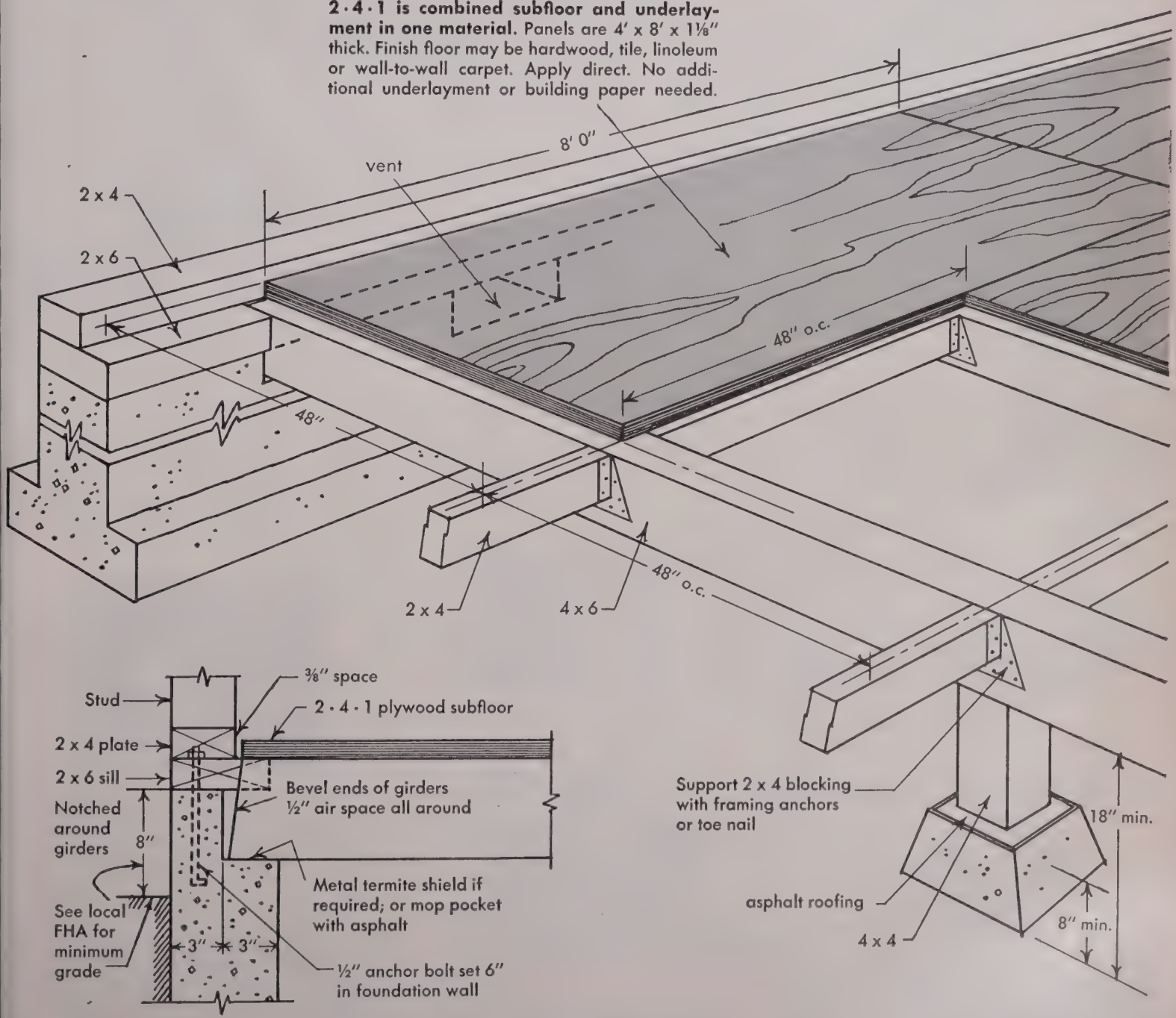
1.	Savings in material and labor costs in subfloor and framing . . .	$ 78.00
2.	Eliminate underlayment in kitchen, bathroom. Labor and material .	30.00
3.	Eliminate need for underlayment beneath 5/16" strip flooring. (Note: system permits premium strip flooring to be used at price competitive with ordinary 25/32" flooring). Labor and material @ 20c per square foot	170.00
4.	Savings afforded by ease of access to work by heating and plumbing subcontractors. (Panels can be taken up as needed during job) . .	60.00
5.	Savings in framing, sheathing, siding due to 12" less exterior wall height. Labor and material	40.00
6.	Elimination of concrete steps and landings in three places due to lower floor. Labor and material	90.00
7.	Savings on painting contract, staging, etc., due to 12" less exterior wall height. Elimination of framing around heat openings in floor. Labor and material	32.00
	*TOTAL SAVINGS REPORTED BY CONTINENTAL CONSTRUCTION CO. . .	$500.00

Other builders report varying savings depending upon local labor and material costs, type of finish flooring, and type of construction formerly used (i.e., slab, plank and beam construction).

revolutionary new plywood subfloor-underlay

up to $500.00 per house*

2·4·1 is combined subfloor and underlayment in one material. Panels are 4′ x 8′ x 1⅛″ thick. Finish floor may be hardwood, tile, linoleum or wall-to-wall carpet. Apply direct. No additional underlayment or building paper needed.



FOR MORE INFORMATION, write Douglas Fir Plywood Association, Tacoma 2, Washington

Harry F. Manning, noted Chicago architect, says:



"I BUILT THIS LOW-COST COOLING INTO MY OWN HOME"

Mr. Manning writes:
"I would like to take this opportunity to let you know how pleased I am with the operation of my R & M Attic Fan. You'll recall, I was prepared at one time to invest in a room unit cooler. However, during the extreme heat of last summer, your equipment was subjected to a rather rigid test, and I now find the fan operation alone produces a very satisfactory cooling effect. In view of the low initial cost and low cost of operation, I'd call this a 'gilt-edged' investment!"

IMPRESS YOUR PROSPECTS with cool sleeping, cool living, for as little as $145.00 list—including automatic ceiling shutter! Your prospects may not have Mr. Manning's technical background, but they certainly share his desire for cooling every room in the house for so little money! Fan requires only 18″ attic clearance; fits narrow hallways. 5,000 to 16,000 CFM. Available with or without automatic ceiling shutter. Fan guaranteed 5 years; motor and shutter, 1 year. Write for full details about this built-in sales talk!

EASY TO INSTALL—1-2-3!



Fan and shutter arrive set up. Simply place fan over framed ceiling opening. Rubber cushion makes it self-sealing!



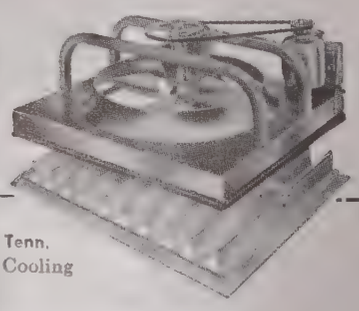
Complete automatic shutter unit screws to ceiling opening frame; flange forms trim. No finishing needed.



Ready-made attic louvers can be installed quickly by one man. Sizes for each of various fan sizes.

ROBBINS & MYERS

"Package" *attic fans* R&M



IT'S FREE!



ROBBINS & MYERS, INC.
Fan Division HH-66, Box 3737, Memphis 14, Tenn.
Please send your booklet, "R & M Comfort Cooling and Ventilating," A.I.A. File No. 30-D-1.

*Name*_____

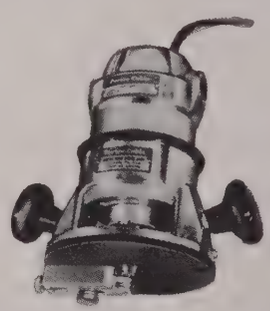
*Address*_____

City ____ *Zone* ____ *State* ____

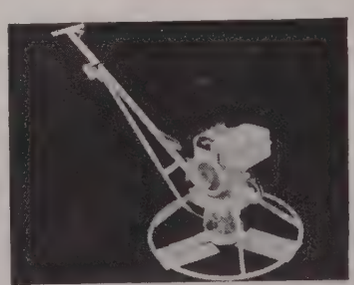
for further details check numbered coupon p. 292



p. "Dandie" concrete mixer is easily maneuverable on the job. Mixing blades added to customary mixing buckets inside the drum give a sideways action that mixes concrete thoroughly. Discharge chute is tilted to reach deep into drum, empties fast. Controls, levers are designed for easy operation and readability. Mixer needs only one man to operate, has one bag capacity, and is powered either by 10- or 16 hp gas engine. Kwik-Mix Co., Port Washington, Wis.



q. Trimming kit and guide for laminated plastics simplifies flush and bevel trimming by eliminating adjustment. Designed for use with Models 511 and 100 portable electric routers, kit makes plastics trimming accurate, easy. Single bit handles both level and flush trimming. Once bit is centered over roller, a locking screw sees to it that adjustment does not change. Micrometer-type threads on centering screw permit fine adjustment. Complete information, prices, catalogue from Porter-Cable Machine Co., Syracuse, N.Y.



r. White T-3 troweler incorporates a safety throttle control in its design, eliminating danger of machine getting away from you. When you let go of handle, troweler slows to idle, stops rotating. You can also adjust blade pitch during operation by pulling up on handle lever for full pitch, releasing for flat blade. Machine covers 28″ circle with enough weight to hard trowel, is small enough to carry through a door, take up and down steps. 2.2 hp engine. Price not given. White Mfg. Co., Elkhart, Ind.

continued on p. 232





The Greenbrier, White Sulphur Springs, West Virginia • Bloomingdale's, Stamford, Conn., Raymond Loewy Corp



Private residence, Tucson, Arizona, William Wilde, Architect

Canvas Shading

the economical solution to any problem of SUN CONTROL

You'll enjoy greater freedom in building orientation, greater freedom in the use of glass areas when you specify canvas sunshades, whether for commercial, institutional, or residential structures. Since unshaded windows are the greatest single source of heat gain, you need protection for every square foot of glass exposed to hot sun rays. And canvas provides the economical solution.

With canvas awnings screening out 65 to 75 per cent of the sun's heat, capacity requirements for cooling systems are lowered and expensive accessory equipment often eliminated. Thus, a canvas installation more than pays for itself with money saved on the initial purchase of air conditioning equipment, plus affording a continued savings over the years on operating expense.

Your local canvas goods manufacturer is equipped to fabricate canvas installations designed in any shape or size, as an integral part of the original plan or added to meet problems of sun protection that arise after construction. Look for him listed under "Awnings" in the yellow pages of your phone book.

See our catalog 19f/Ca in Sweet's Architectural File or write for a free copy. It contains original and practical ideas, plus helpful instructions for specifying canvas.

THE CANVAS AWNING INSTITUTE INC.

Canvas Awning Institute Inc.

and National Cotton Council

P O. BOX 9907 MEMPHIS, TENNESSEE

"We put a lifetime of good looks and fire-safety into our roof"



say Sherman Huffman, Melvin Huffman and Z. G. Huffman, Jr., of Huffman Bros., Charleston, West Virginia, builders of this hillside ranch house.





Gold Bond "Economy 250" forms an attractive, maintenance-free roof

"We used Gold Bond Corrugated Asbestone to give this fast-selling Charleston house a roof that will stay bright and fresh looking permanently and stand up in all kinds of weather. 'Economy 250' has a heat reflective value that keeps homes considerably cooler. These features mean a great deal to prospective home buyers.

"We used a staggered joint method of roof construction, putting on 24" by 42" panels of Gold Bond Corrugated Asbestone with an 18" exposure and 6" lap. Roof sheathing was eliminated and the factory pre-cut sheets went up fast and easily. As a result, we not only put up a beautiful roof, but saved on materials and labor at the same time. There's a very definite place in today's home construction for Gold Bond 'Economy 250'."

See how this economical roof can help you build *your* home sales. WRITE Dept. HH-66 for full roof construction details on the Charleston House.

NATIONAL GYPSUM COMPANY • BUFFALO 2, NEW YORK

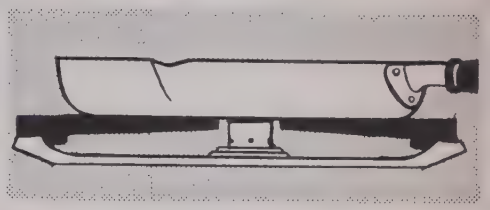
Build better with Gold Bond® . . . CORRUGATED ASBESTONE



LATH, PLASTER AND LIME | GYPSUM BOARD PRODUCTS | INSULATION BOARDS PLANKS AND TILES | ROCK WOOL INSULATION | PAINTS AND TEXTURES | ACOUSTICAL TILES | ASBESTOS ROOFING AND SIDING

more sales-appeal for your homes...

NEW Caloric built-in gas ranges with THERMO-SET







Make the convenience of THERMO-SET and the Caloric built-in gas range the most powerful selling feature of your homes! Housewives everywhere are demanding this years-ahead concept of cooking ease.

The housewife simply turns the automatic dial to the desired temperature. The THERMO-SET Sensing Element presses against the bottom of her cooking vessel and keeps food temperature constant. No burning, no scorching no boilovers, no smoke, no spatter!

And the new Caloric top burner unit is color-keyed to match or mix with the separate oven broilers. Beside the popular satin metal finish, both the oven broiler *and* the top burner unit are available in porcelain enamel, in pastel shades of pink, green, yellow, and blue as well as coppertone, black and white.

Caloric has given the top burners a whole new look! Top burners are incorporated into a single 4-burner unit; grates are slimmed down; porcelain enamel drip pans are added. It all means easier installation, easier cleaning . . . and more sales!

The separate oven broilers, installed at any height, eliminate stooping, thanks to Caloric's eye-level controls.

One look at this marvelous new built-in gas range and you'll discover why now, more than ever, in the homes of today, the call's for Caloric!

CALORIC APPLIANCE CORPORATION
RANGES DRYERS DISPOSERS

Caloric Appliance Corporation
Dept. HH
Topton, Pennsylvania

Please send me more information on the new Caloric built-in gas range with THERMO-SET

Name_____

Address_____

City_____ Zone____ State_____

DOW

THREE DOW PROFIT MAKERS

. . . for men who know building *inside and out*

1

exterior Latex masonry paint provides maximum beauty and durability in minimum time

When your plans call for exterior masonry surfaces, it will pay you to call for Latex paint! Thousands of jobs have proved that paints made with Dow Latex not only look beautiful, but *stay* beautiful year after year. They're weatherproof, alkali resistant, self cleaning. They let masonry breathe . . . no ground stains, no blistering or peeling over properly prepared surfaces. And work schedules never wait for Latex paints—they dry quickly and a second coat can be applied before the scaffolding is removed.



St. Brigids Church, winner of Award of Merit, A.I.A. 1955 Nat'l Convention. Architect, Chaix and Johnson, A.I.A., Los Angeles, Calif. Painting Contractor—J. P. Carroll, Los Angeles, Calif.

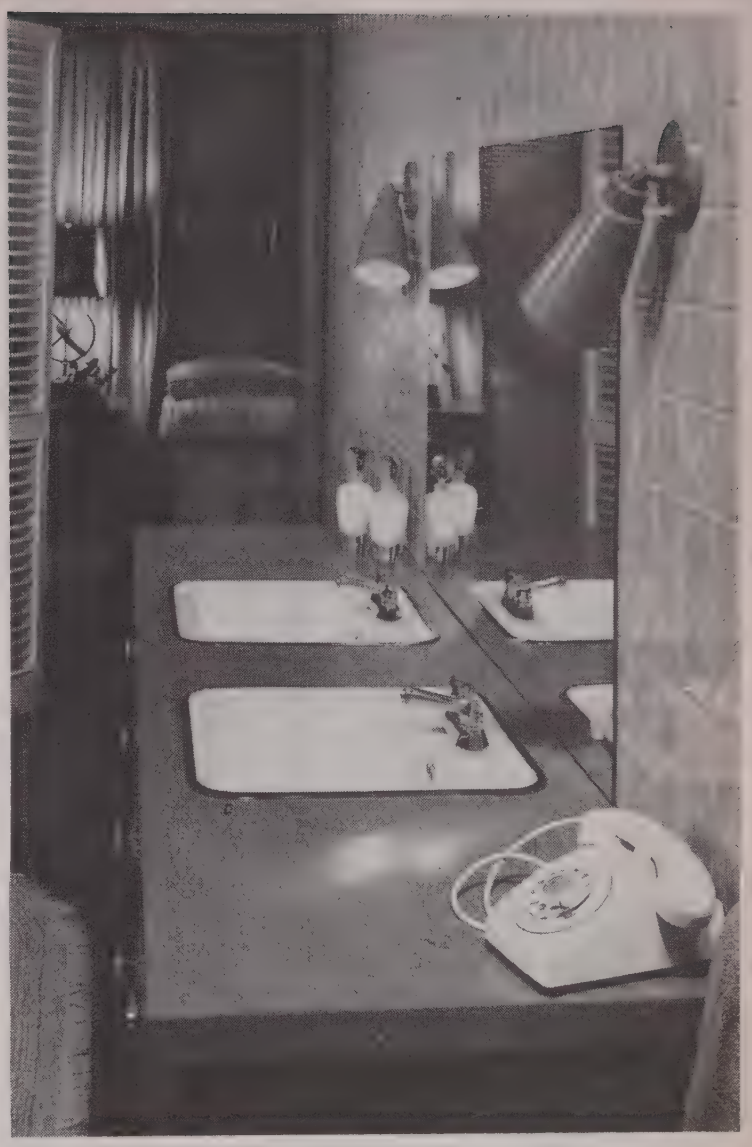
2

guaranteed Styron® plastic

wall tile makes

luxurious walls practical

Installation is quick and easy, goes right on regular walls without wire lath or special structural detail, is especially practical for dry walls. Styron leads the field in color styling . . . tile made from it is durable, satin smooth, moisture-proof. Now your Certified Dealer can *guarantee* that Styron plastic wall tile meets Department of Commerce standards and the minimum property requirements of the F.H.A. It will pay you to specify plastic wall tile made of Styron.





3

lifetime Styrofoam insulation

goes in quickly for important savings

in labor costs

You'll share the benefits with your clients when you specify permanent insulation made of Styrofoam for perimeter, cavity walls and basements. Styrofoam® (a Dow plastic foam) resists rot, mold, deterioration . . . and vermin. It's an excellent water vapor barrier. It gives your clients a lifetime of comfort and reduced fuel bills. And it's easy and economical to install because this feather-light foamed plastic is so clean and easy to handle, so structurally strong. Ask Dow for details. THE DOW CHEMICAL COMPANY, Midland, Mich., Dept. PL583Q.

you can depend on DOW PLASTICS

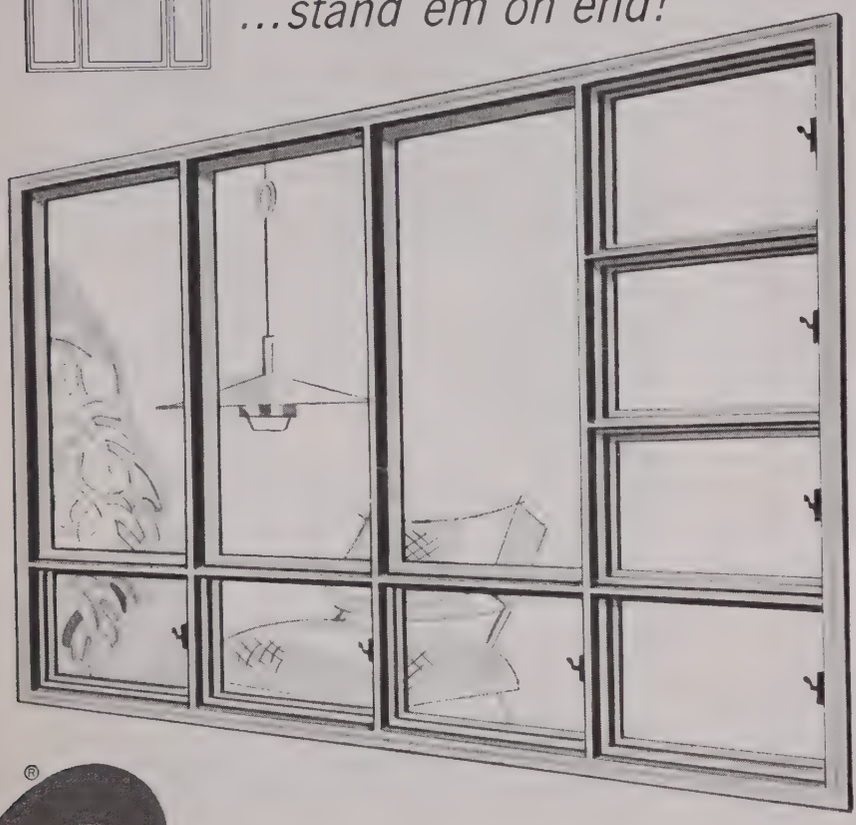
DOW

for further details check numbered coupon p. 292

...stack 'em! ...group 'em!

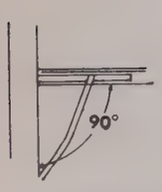
...line 'em up!

...stand 'em on end!

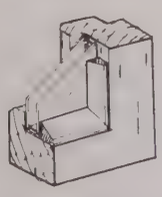


Crestline® stacking awning units

Now you can give your homes new window variety, value and beauty! CRESTLINE Awning units form stacks, ribbons and groups in many combinations of fixed and ventilating sash. Use them in any type home and room! Units install easily, adapt to any wall, and are glazed with Crestopane insulating glass. Full weatherstripping, aluminum screens, and roto-operators are applied to every opening unit. Durable, smooth operating hardware is exclusively designed by CRESTLINE! Build with CRESTLINE—for greater loan values and at prices that mean more profits for you!



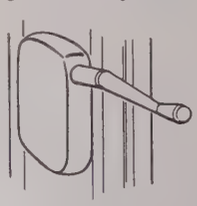
A Crestline first! Operating sash open to 90° for full view and ventilation.



Crestopane insulating glass is factory-applied in all units. (Single glazing optional.)



Extra narrow mullion! Only 1⅛" wide. Beautifies glass walls, broadens view.



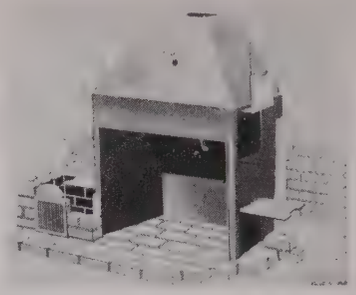
Roto-operator is noiseless, smooth. A standard, permanent part of ventilating units.

In Sweet's Architectural and Light Construction Catalogs

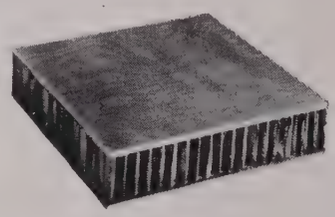
Crestline® Millwork

See your dealer, or write THE SILCREST COMPANY, Dept. H, Wausau, Wisconsin

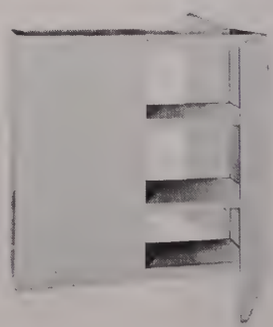
Removable Double-Hung and Slideby Windows • Casements • Louver, Panel and Sash, Garage and Flush Doors • Aluminum Combination Doors • Packaged Trim, and others



s. Fireplace form cuts down on masonry construction costs four ways. Masonry can be laid straightaway with no diagonal courses, unit gives extra heat when it is needed, stops cold drafts along floor. Form has a complete smoke funneling chamber which gives a smooth smoke flow all the way up. Sealing flange around front and bottom seals against heat and smoke leaks. Six sizes, square shape make bigger air chambers, larger heating capacity. From $49.50 to $132. Bennett-Ireland, Inc., Norwich, N.Y.



t. Lightweight structural panel is a sandwich of paper honeycomb between Conolite plastic laminate. Panels are in continuous lengths for seam-free application. Conolite surfaces come in a galaxy of colors, resist liquids, chipping, acids. For greater strength, depending on use, panels are sometimes faced with Masonite next to honeycomb, then covered with Conolite. Prices depend upon application, thickness, lengths. You can use panels all over the house—in kitchens, baths, as wall partitions. Continental Can Co., New York 17.



u. Wall peninsula cabinet stows away kitchen staples, makes it easy to get at them from either side of unit. Cabinet shown above is 24" wide, 13" deep, 30" high, equipped with two shelves that can be adjusted to varying depths. Unit is suspended from ceiling or soffit, double doors swing fully open for easy access above a snack bar, over a room divider or a food preparation island. Model here costs about $64.50; 24" high cabinet is $56.50. Republic Steel Kitchens, Republic Steel Corp., Canton 5, Ohio.

continued on p. 238



ADVERTISED IN LIFE

paves the way for smoother sales

The pre-selling power of LIFE is a sure path to faster sales . . . and more of them.

Why? Because LIFE reaches 3 out of 5 households in the average community in the course of 13 issues* . . . 38.2% of the people living in households with $7,000-a-year-and-over income.†

Many of these people are *your* prospects. And every week more of them are pre-sold on LIFE-advertised building materials and equipment.

By featuring these same LIFE-advertised products in the homes you build—your chances of making sales are greatly increased. The strong consumer demand for LIFE-featured products invariably helps sell the total house.

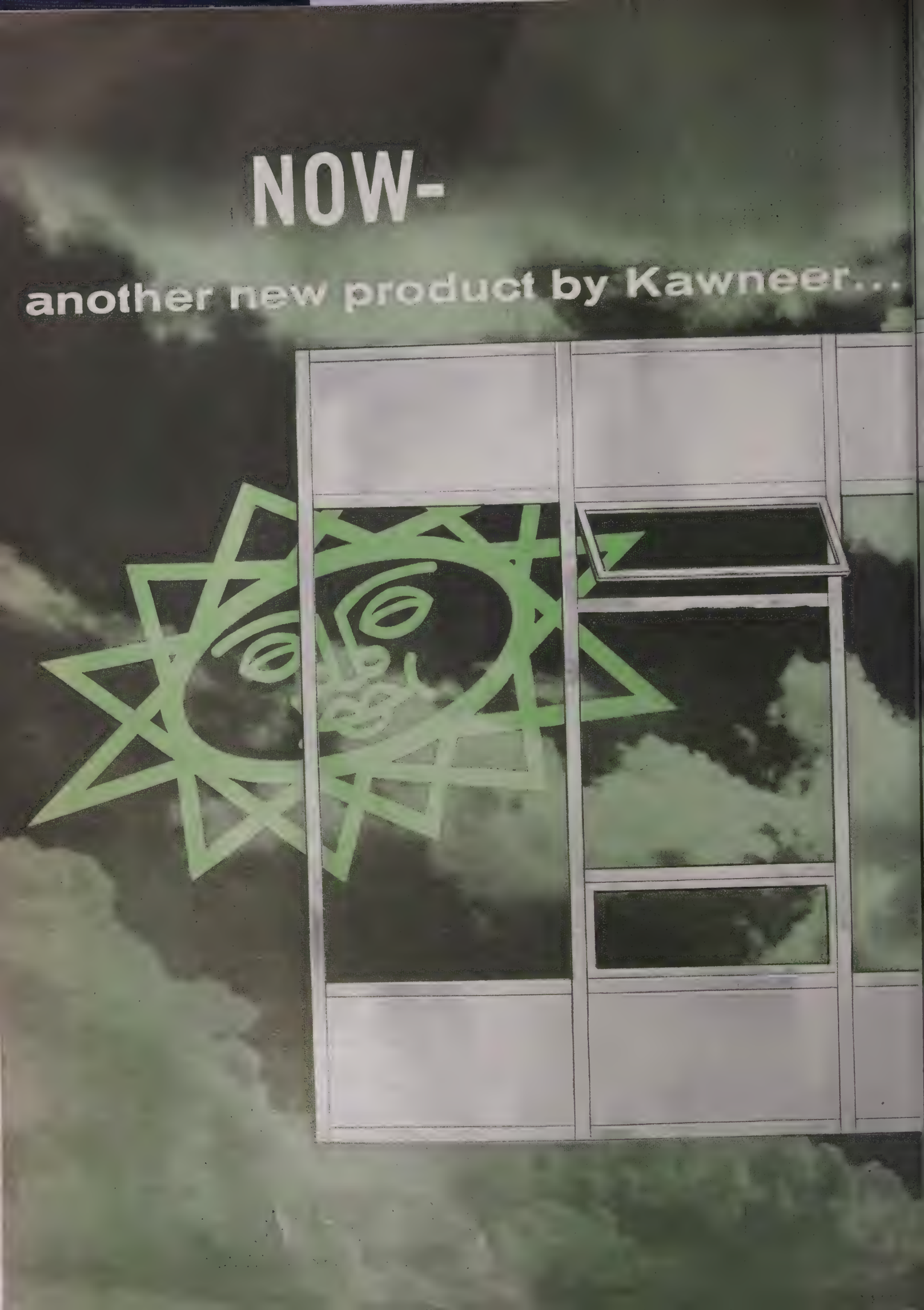
Source: **A Study of the Household Accumulative Audience of LIFE.*
†*A Study of Four Media.*

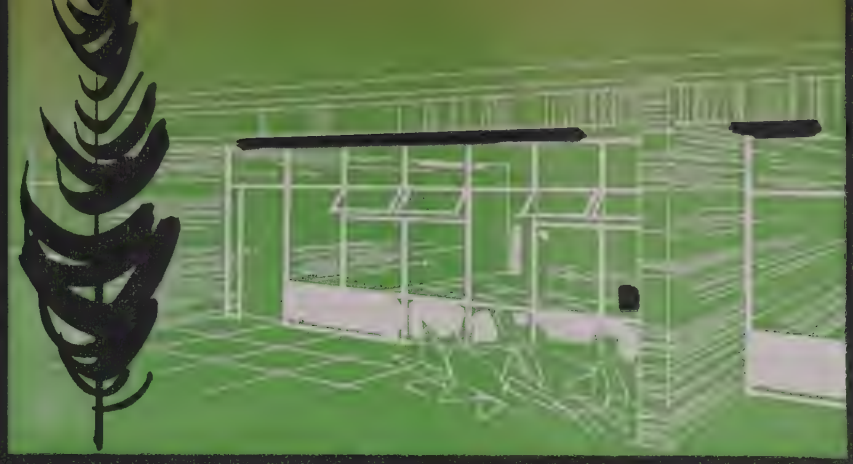
LIFE

9 Rockefeller Plaza,
New York 17, N. Y.

NOW-

another new product by Kawneer...





a **unit wall** with all the features you need for contemporary construction

Kawneer announces another new creative tool for the architect . . . the KAWNEER UNIT WALL. This versatile exterior wall system is composed of standard components that provide complete flexibility of design. There is a wide selection of modular components, window units, both operable and fixed, solid panels with colored porcelain and insulation, and a complete variety of flush or glazed doors available in many types and sizes. There is a choice of proportions within the units themselves. All parts are readily available because of the standardized program.

Standard units are factory assembled and shipped complete with insulated panel, sash and doors. Now you have complete design flexibility with attractive window, wall and door panels.

MODULAR COMPONENTS. Standard units are provided in modular sizes. Special filler widths are available where required.

SPLIT MULLION DESIGN. Interlocking mullions provide for horizontal expansion and contraction.

CLEAN SIGHT LINES. Glazing beads for fixed sash are recessed to be flush with the mullion, providing clean sight lines and unobstructed vision.

PUTTYLESS GLAZING. Vinyl weatherstripping throughout, reduces glazing time and provides a clean permanent and easily replaceable glazing system.

NO EXPOSED FASTENERS. Units are assembled with concealed fasteners and glazing beads are installed by a positive toe-heel interlock.

FLUSH INTERIOR DESIGN. Interior face of mullion and muntin bars lie in the same plane, facilitating the installation of interior furnishings.

STANDARD DOOR UNITS. Factory assembled door units are offered as an integral part of the program and are interchangeable with wall units.

QUALITY SASH. Specially designed operable sash is provided with double vinyl weather seal and rugged lifetime hardware.

COMPETENT WORKMANSHIP. Closely controlled fabrication and assembly in the factory result in tight, accurately fitted joints and a high quality uniform finish.

RAPID INSTALLATION. A minimum number of parts handled on the job site and adequate provision for building tolerance insure simple accurate installation.

Write for 12-page illustrated Unit Wall book

50TH ANNIVERSARY

Kawneer

General Offices
NILES, MICHIGAN

ARCHITECTURAL PRODUCTS DIVISION

1906 – 1956



MIDWEST will strengthen your competitive picture

MIDWEST's combination of basically better design plus the best of materials and construction methods add up to a better product—a home you can build and sell—competitively.

Leading builders everywhere are turning to prefabrication for the important extra benefits needed to meet the requirements of today's building market—benefits that provide a better service in planning, cost control, and variety of design.

You can put yourself in a better competitive picture by changing to MIDWEST.

We will be glad to send you the details—write today for full information.

There are still opportunities for independent sales representatives in Ohio, Illinois, Indiana, Michigan, West Virginia, Kentucky, Pennsylvania and New York. Write for full information.

MIDWEST HOUSES

MIDWEST HOUSES, INC.
BOX 334 • MANSFIELD, OHIO

Biggest Name in Lighting Fixtures...

progress

adds 2 more product lines

for Building Extras that build extra profits



Complete Selection o

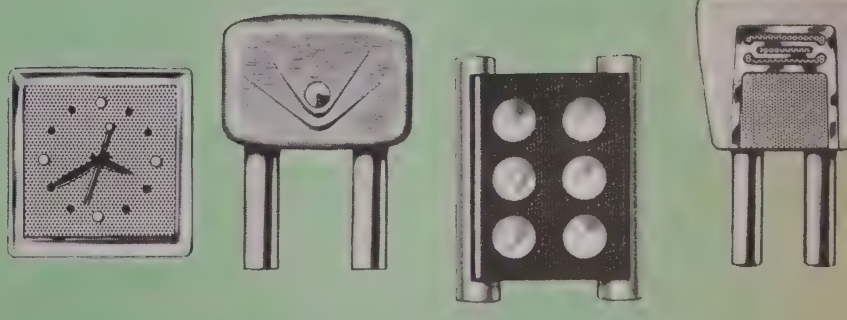
Ventilating Range Hoods

In introducing this new line of ventilatin range hoods, Progress once more demon strates unusual foresight in meeting growin demands for homemaking convenience. I removing kitchen fumes, regulating tempera tures, these ventilating range hoods save o cleaning . . . bring added comfort to moder kitchens. Smartly designed by Progress to fi into any kitchen decor, they come in a choic of heat-resistant, fade-proof finishes; 4 sizes Quality built, they're a sales-closing extra that means extra volume for *you!*

Full Line of Beautiful Door Chimes

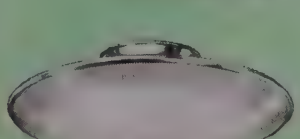


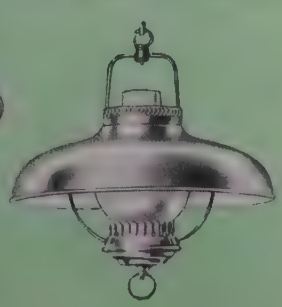
Now Progress brings you a complete line-up of true toned door chimes tuned to wonderful home-maker acceptance! Handsomely styled assortment includes everything from the traditional to today's modern . . . from recessed electric clock chimes to repeating recessed door chimes. 20 styles, every wanted finish in this value-packed line. Typical Progress quality at rock-bottom prices assures PLUS-VALUE with these beautiful door chimes!



progress —the Top Line

highlighting more style, better engineering, more value in Indoor and Outdoor Fixtures!











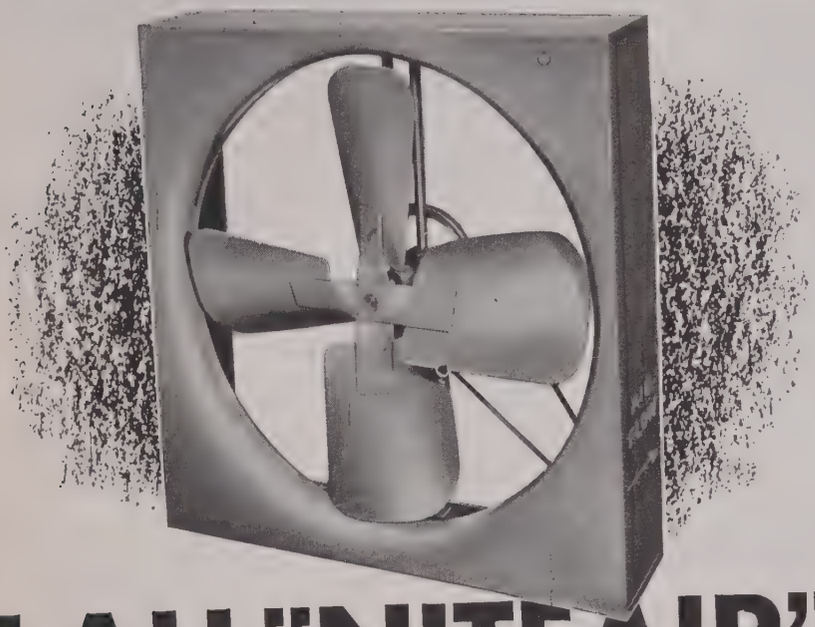


AHLI AMERICAN LIGHTING HOME INSTITUTE

Progress Manufacturing Company **Philadelphia 34, Pa.**

for further details check numbered coupon p. 292

Particular Builders Specify and Install



LAU "NITEAIR"® PANEL FANS



Economically installed at the building stage

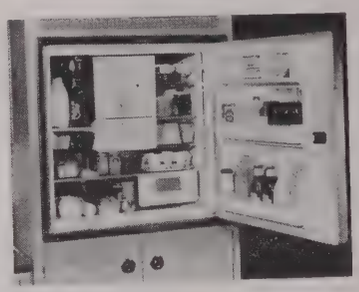
A LAU "Niteair" Fan adds selling appeal plus value . . . and at low cost . . . in every home you build. They are available in a wide size range, from 24" to 48" . . . air deliveries from 4750 to 17,564 c.f.m. Built for long, quiet, trouble-free service . . . statically balanced. Used in many homes with air-conditioning, to remove stagnant air from attics and relieve the cooling load. See your Lau fan representative for the facts.

STEVE ALLEN WILL SELL LAU FANS IN 1956 OVER THE NBC NETWORK, COAST-TO-COAST **tonight**

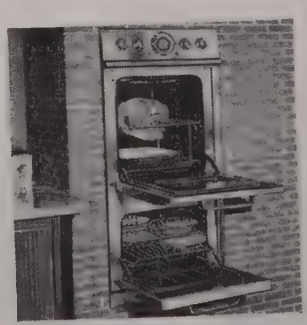
LAU FANS · The Lau Blower Co.
2007 Home Avenue, Dayton 7, Ohio • Kitchener, Ont., Canada • Azusa, Calif.



v. Maytag washer and dryer are automatic, handsomely styled matchmates. All-fabric washer will take good care of natural, as well as newer man-made fibers, has push-button control panel to regulate water for any kind of fabric washed. Dryer is also operated by push-button. No-venting arrangement permits flush-to-wall installation since unit operates on a water condensation drying principle that does not need vent. Washers from $349.95; dryers from $274.95. The Maytag Co., Newton, Iowa.



w. Built-in refrigerator with ice maker has an 8.2 cu. ft. capacity that divides to give a 26 lb. freezer compartment and 13.3 sq. ft. of shelf area. Among the features: push-button defrosting, meat and cheese keepers, capacious door shelves. Model fits into exterior cabinet space 2′ x 3′. You can get left or right hand doors in stainless steel, copper and 25 colors. Price of the RI series is about $382.50 painted and installed to match other kitchen appliances. Storage cabinets can be built below unit, as seen in photograph. Revco, Inc., Deerfield, Mich.



x. Built-in bi-level two-door oven has an automatic rotisserie in its top compartment that can be removed for regular baking operations. Other features include a carving rack, turnover grill for small cuts of meat, raisable broiler rack. An eye-level control panel with automatic timer turns oven on or off by remote control. Unit can mix or match with any kitchen accessories since it's available in brushed chrome, porcelain coppertone and five colors. With chrome door, $349.95; in color, $339.95. Hotpoint Co., Chicago.

continued on p. 244

Dramatically new Electric Modular Kitchens

NEW "STACK-ON" INSTALLATION requires no special floor or wall work.
FLEXIBILITY, color and appliance integration that is almost endless.
NEW, ELEGANT STYLING that attracts prospects (especially wives). Makes selling the whole house easier.

This dramatic new General Electric kitchen is only one of dozens that can be assembled in your houses.

All the components are of standard measurement to suit your kitchen layouts—and your customers' budgets. "U," "L" or Island kitchens take these flexible General Electric appliances with ease.

A G-E Distributor Builder Specialist will work with you on your kitchen design, help you with color styling, your appliance installation—work hand in hand with you all along the line.

And best of all . . .

They're available today!

These flexible kitchen centers are on stock at your General Electric distributor's—in all colors. They are ready to be shipped to your building site *now*—yes *now!*

Furthermore, General Electric is the only manufacturer who offers you this today!

So call or write your nearest General Electric distributor right away and get these new Modular Units for your houses. Or write to: General Electric Company, Home Bureau, Appliance Park, Louisville 1, Ky.

Regardless of what price houses you are building . . .

$9,600 or $96,000

. . . the magnificent General Electric Modular Kitchen-Laundry adds strong selling power. And your house buyers pay only a few dollars extra a month when the kitchen price is included in their "Packaged Mortgage" plan.

New, Big advertising campaign!

Prospects for houses will see the new, exciting General Electric Kitchen-Laundry in colorful spreads in forthcoming issues of *Life*, *Better Homes and Gardens* and other magazines. Tie in with this powerful promotion in *your* home town and *sell your houses faster!*

Progress Is Our Most Important Product

GENERAL ELECTRIC

SEND FOR THIS NOW!

General Electric Company, Home Bureau
Appliance Park, Louisville 1, Kentucky

Yes! Send me by return mail General Electric's free builder handbook that will answer my questions about Mix-or-Match Modular Kitchens.

NAME_____
(PLEASE PRINT)

STREET ADDRESS_____

CITY_____ STATE_____

PUB. NO. B24-0386 HH



For the irresistible Selling appeal of Beauty where it Counts . . . you can depend on

ROYAL OAK FLOORING

That's because the beauty and dignity inherent in oak are brought into full play by refinements conforming to Crossett standards, developed through intensive research. And it is the sum of these refinements, reflected in the finished floor, which sparks the spontaneous admiration for Royal Oak Flooring and converts your prospect into a buyer.

Constant betterment



through research.

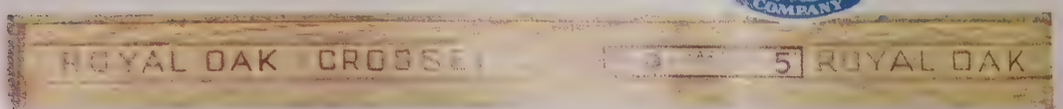
CROSSETT

LUMBER COMPANY

A Division of The Crossett Company

CROSSETT, ARKANSAS





New Products

for further details check numbered coupon p. 292



y. Cabinets for built-ins are tailored to fit all popular brands of kitchen appliances. Built-in and drop-in units are made in a variety of factory finishes and also come unfinished so that they may be matched with other kitchen components. More than 100 sizes of wall and base cabinets can be combined to fit any kitchen plan. Models are available for built-in ovens, refrigerators, etc., drop-in ranges and sinks. Cabinets above with countertop and sink bowl cost about $900. Brammer Mfg. Co., Davenport, Iowa.

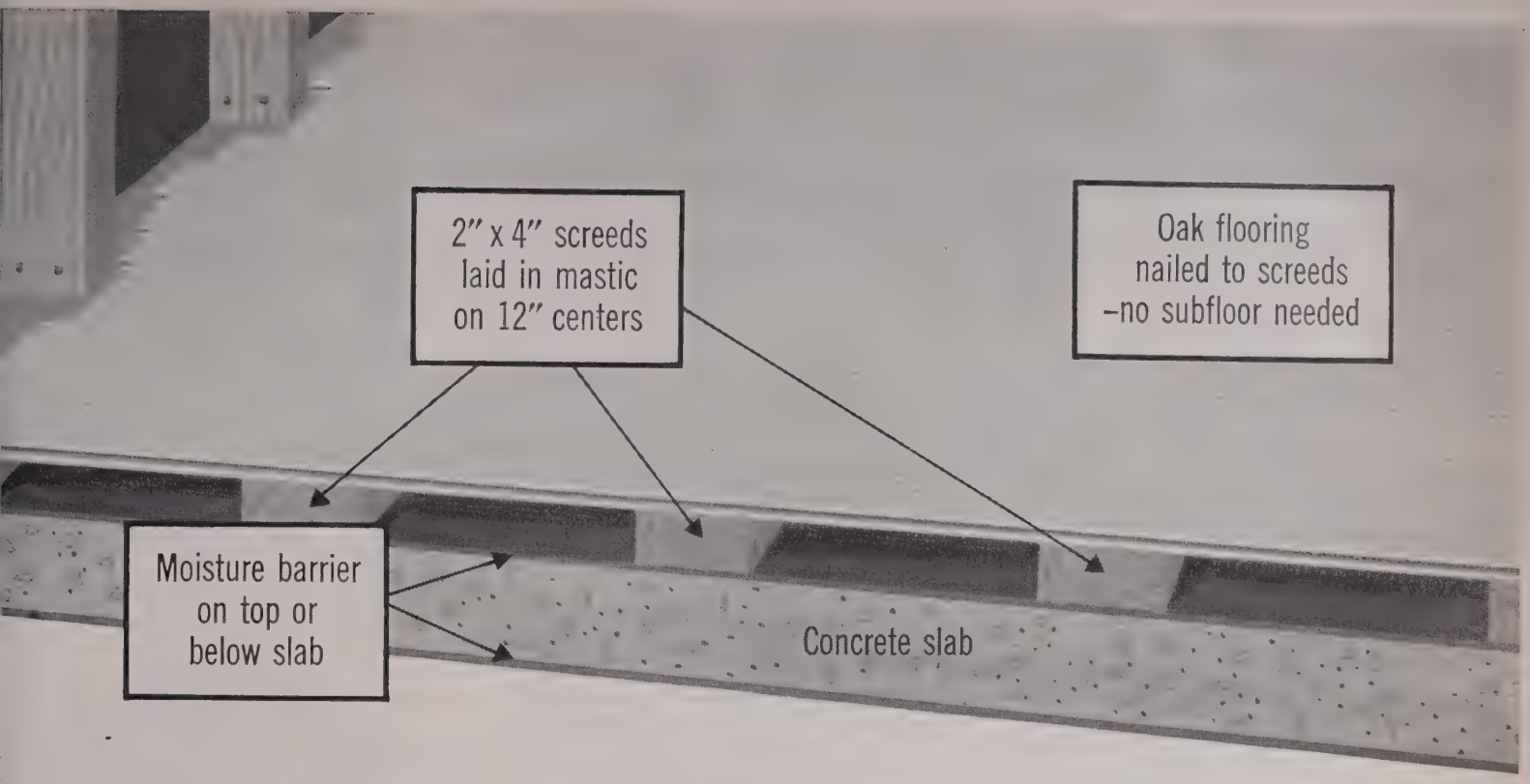


z. Ventilating range hood carries three-speed push-button controls that operate fan and light. Two hood models allow choice between a square cutout for use with Berns Air King Twin Blower and a round cutout used with "CF" or "TC" series fans. Hoods come in 24", 30", 36" and 42" lengths, fit cabinet depths from 11½" to 13½". They are finished in stainless steel, white enamel and coppertone with matching splash plates available. Hoods range from $22.60 to $59.50 depending on finish, length. Berns Mfg. Corp., Chicago 18, Ill.



aa. Hideaway four-unit cooking top in Admiral kitchen slides out from beneath the built-in oven. When not in use, cooking top moves out of sight, leaving space for work. Safety bar automatically cuts off power on contact if unit is returned to hideaway position with a pan forgotten on a cooking top. More space savers include recessed refrigerator and upright freezer with brushed chrome doors, the handsome oven with see-into door. All these units are manufactured by the Admiral Corp., Chicago 47, Ill.

continued on p. 250



New low-cost way to lay Strip Oak Floors over concrete



Random-length screeds are laid in a staggered pattern. The asphalt mastic anchors them permanently to the slab. Flooring is nailed to screeds and sanding and finishing follow in usual manner. Prefinished flooring may be used.



Proven successful in thousands of homes

Wherever homes are built on concrete slab foundations this economical "screeds-in-mastic" method of installing Strip Oak Flooring is being used.

By eliminating the subfloor, it cuts construction costs and saves time. Builders can afford to give even lowest-budget homes the proven sales appeal of Oak Floors.

If you haven't tried this money-saving, fully-approved construction method, be sure to mail the coupon below for free installation manual. Simple step-by-step instructions and photographs enable any carpenter or floor layer to use the "screeds-in-mastic" method successfully . . . without previous experience.

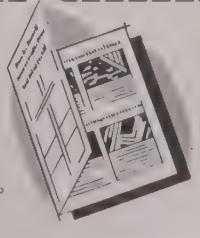
Oak floors add to the salability of slab foundation homes because of their beauty, durability, high insulating value, and natural resilience which counteracts the uncomfortable hardness of concrete. They're preferred by 8 out of 10 home buyers, builders and architects.

NOFMA CERTIFIED OAK FLOORS

NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION
Sterick Building • Memphis 3, Tenn.

MAIL COUPON
for free installation manual

NATIONAL OAK FLOORING
MANUFACTURERS' ASSOCIATION
865 STERICK BLDG., MEMPHIS 3, TENN.



Please send free copy of your manual, "How To Install Hardwood Strip Floors Over Concrete Slabs."

Name_____

Address_____

City_____ State_____

sells finer looking
homes faster!
WHITESTONE ROOFING MARBLE



because it's lasting

All the wearability of genuine marble. No seams to bulge, nothing can rot, and there are no overlapping edges to loosen or lift.

because it's practical



Whitestone is self-insulating. It lowers heating bills in winter and keeps interiors cooler in summer, cutting air conditioning costs.



because it's beautiful

Whitestone's gleaming whiteness complements any design, any colors. And it will *stay* beautiful. The fine crystalline grains of marble will remain fresh and unstained through the years.

SEND US THIS COUPON

Costs no more than most roofing materials but what a difference it makes!

FOR FULL INFORMATION AND SAMPLES

WILLINGHAM-LITTLE STONE CO.
55 Marietta St., N.W. — Room 1323
Atlanta, Georgia
Please send me samples and information on Whitestone Roofing Marble.

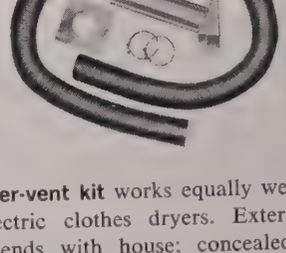
Name_____

Firm_____ Address_____

for further details check numbered coupon on p. 293



bb. Snap-on gutter guard keeps leaves, debris from clogging up gutters. Guard snaps on lip of gutter, outer edge is turned up to prevent water running down and staining house. Guard also keeps gutters free of water so they cannot freeze in winter. Made of ¼" mesh wire screen with aluminum molding, guard fits 4" or 5" gutters, can be used on either box or round type. Prices vary from 47¢ to 69¢ ea. for 2' section by 5" wide. Lockhart Mfg. Corp., Detroit 12, Mich.



cc. Dryer-vent kit works equally well for gas and electric clothes dryers. Exterior hood style blends with house; concealed floating valve retards back draft, gives better performance, according to manufacturer. Kit contains all-aluminum Leigh Dryer-Vent with flanged plate in 3" or 4" diameter components, 8' length of flexible duct and two clamps. Connector kits are available for longer runs. 3" kit costs about $7.25; 4" model sells for $8.75. Leigh Bldg. Prod. Div., Air Control Prod.. Coopersville, Mich.



dd. Verti-Line package pump is pre-engineered for ordering by unit number and delivery as a complete package, can be used for wells as small as 4" in diameter. Pumps are available from 2-7½ hp sizes with heads to 340', capacities from 200 to 7,500 g.p.h. GE VHS weatherproof motor gives 60 cycle, 3,600 rpm operation. Column and shaft assembly, equal to setting specified, are equipped with 5' bearing centers, ¾" stainless steel shaft and rubber bearings. Two sizes, 4" and 6". Prices depend upon requirements. Layne & Bowler Pump Co., Los Angeles 22, Calif.

continued on p. 256



They call Carlyle Quarry Tile,

"The Home-Builder's Tile"

No other surfacing material has so many good uses in so many areas throughout today's homes. Extremely durable . . . low in cost.

Here, floor and fireplace of Carlyle Quarry Tile set the entire interior scheme and are ready for every activity. Quarry tile's equally colorful and permanently carefree in entries, kitchens, family rooms, utility areas, patios and walks.

Carlyle . . . the Most Complete Line of Quarry Tile

a product of

THE MOSAIC® TILE COMPANY

America's largest manufacturer of ceramic tile.

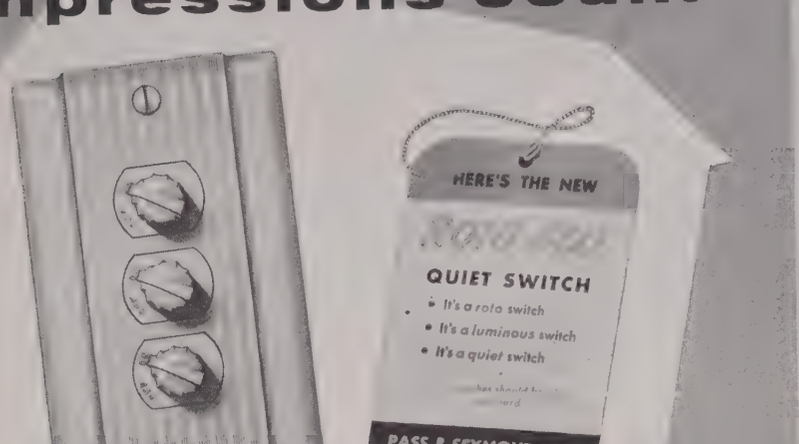
Member: Tile Council of America and The Producers' Council, Inc.

Over 5000 Tile Contractors to serve you.

Showrooms, Warehouses and Factories from Coast to Coast . . .

WAREHOUSES AND SHOWROOMS: Atlanta, Baltimore, Boston, Chicago, Corona, Calif., Dallas, Denver, Detroit, El Segundo, Calif., Fresno, Greensboro, Hartford, Hempstead, L.I., N.Y., Hollywood, Ironton, Little Rock, Matawan, Miami, Minneapolis, New Orleans, North Hollywood, Philadelphia, Portland, Rosemead, Calif., Salt Lake City, San Diego, San Francisco, Seattle, Tampa, Washington, D.C., Zanesville. SHOWROOMS: Milwaukee, New York. REPRESENTATIVES: Birmingham, Buffalo, Cincinnati, Kansas City, Oklahoma City, Pittsburgh. FACTORIES: Zanesville & Ironton, Ohio, Matawan, N.J., Little Rock, Ark., Jackson, Miss., Corona & El Segundo, Calif.

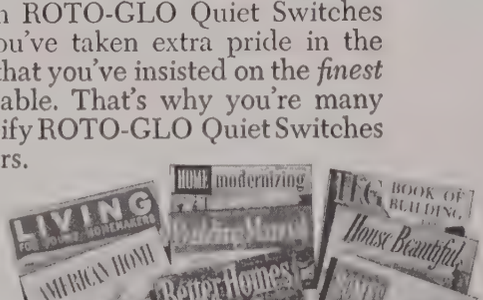
where 1st impressions count



count on ROTO-GLO® QUIET SWITCHES

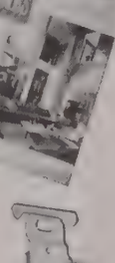
When a prospective buyer goes through your house, first impressions count. Built-in wall ovens and ranges . . . lighting fixtures . . . modern ROTO-GLO Quiet Switches — all create the feeling you've taken extra pride in the house bearing your name, that you've insisted on the *finest* electrical equipment available. That's why you're many steps ahead when you specify ROTO-GLO Quiet Switches to your electrical contractors.

Consumers are being told and sold on ROTO-GLO by the biggest national advertising and merchandising promotion in the wiring device industry. Millions of pre-sold consumers are reading about ROTO-GLO Quiet Switches in leading shelter magazines. The response for Pass & Seymour's booklet, "Modern Electrical Living," has been overwhelming. Certainly this proves they're interested in the whisper-quiet roto-type switch that glows in the dark . . . *that costs only a few pennies more.*





Despard Type 15 Amp.
120 Volts AC
277 Volts AC



Strap Type 15 Amp.
120 Volts AC

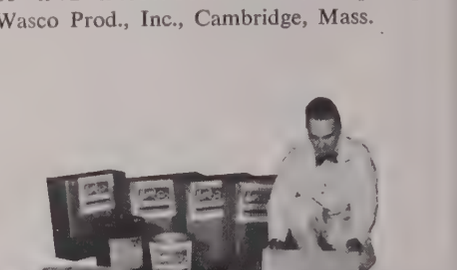
Send today for complete information on the ROTO-GLO Quiet Switch and for a folder on modern Despard wiring devices, to Dept. HH-13.

P&S® PASS & SEYMOUR, INC.
SYRACUSE 9, NEW YORK
71 Murray St., New York 7, N.Y. 1229 W. Washington Blvd., Chicago 7, Ill.
In Canada: Renfrew Elec. & Refrig. Co., Ltd., Renfrew, Ontario

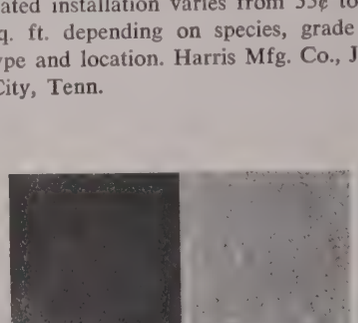
for further details check numbered coupon on p. 293



ee. Acrylite plastic panels form room dividers, screens and decorative accents all over the house. With them, you can screen-in privacy, still let in softly diffused light. First panel has butterflies, Japanese Ginko leaves and maple leaves in an airy, gossamer design. Second panel plays up the natural texture of woven straw. *Butterflies* comes in sheets 23" x 35" x .100 and 23" x 17½" x .100. *Straw* sheets are 35" x 60" x .100 and 35" x 72" x .100. From $1.25-$1.50 per sq. ft. Wasco Prod., Inc., Cambridge, Mass.



ff. Parquet floor can be laid quickly over concrete, plywood or wood subfloors. The hardwood slats come in units 2½ sq. ft., held intact by paper glued to face. Once you install in position, paper is easily removed and you move squares into place, seated and finished according to color desired. Bond-Wood comes in oak, walnut, maple or beech. Estimated installation varies from 55¢ to 90¢ per sq. ft. depending on species, grade and job type and location. Harris Mfg. Co., Johnson City, Tenn.



gg. New KenCork floor tile now comes in a range of natural cork colors from light to dark. Tile is now made in ⅛" thickness as well as 3/16", 5/16" and ½" gauges. A plastic-fortified factory finish makes new KenCork easier to maintain. ⅛" thickness is available in 6" x 12" tiles, plus 9" and 12" sq. sizes. 3/16" gauge comes in 6" x 12", 9", 12", and 12" x 24" tiles. Price of ⅛" tile is approximately 50¢ per sq. ft. uninstalled. Color range makes it possible to vary floor patterns from room to room. KenTile, Inc., Brooklyn 15, N.Y.

continued on p. 262

Colorful Tile-Tex floors add to the sales-appeal of your homes . . .

You can turn home shoppers into buyers with attractive, work-saving floors.

While you may want to use the conventional marbleized asphalt or vinyl-asbestos floor tiles for most of the house, here are some suggestions that are bound to create added interest:

Terrazzo-type vinyl-asbestos tile in kitchen and bathroom . . . cork-like asphalt or vinyl-asbestos tile in den . . . Tile-Tex's exclusive plank-shaped asphalt tile in wood-tone colors for basement and living-room.

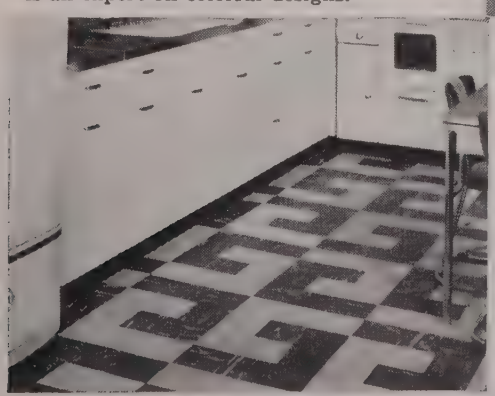
Tile-Tex floor tiles come in a variety of gauges and in a selection of over 100 customer-pleasing colors.

Call in your Tile-Tex Flooring Contractor. He will show you how Tile-Tex products can also help your building budget.



Tile-Tex Asphalt Tile has long been a favorite with builders. Furnishings by Milton Okrent Company, Cincinnati, Ohio.

Your Tile-Tex Flooring Contractor is an expert on colorful designs.



THE TILE-TEX DIVISION, THE FLINTKOTE COMPANY
1234 McKinley Avenue, Chicago Heights, Illinois

In the 11 Western states: Pioneer Division, The Flintkote Company, P. O. Box 2218, Terminal Annex, Los Angeles, Calif.

In Canada: The Flintkote Company of Canada, Ltd., 30th Street, Long Branch, Toronto.

TILE-TEX . . . *Floors of Lasting Beauty*

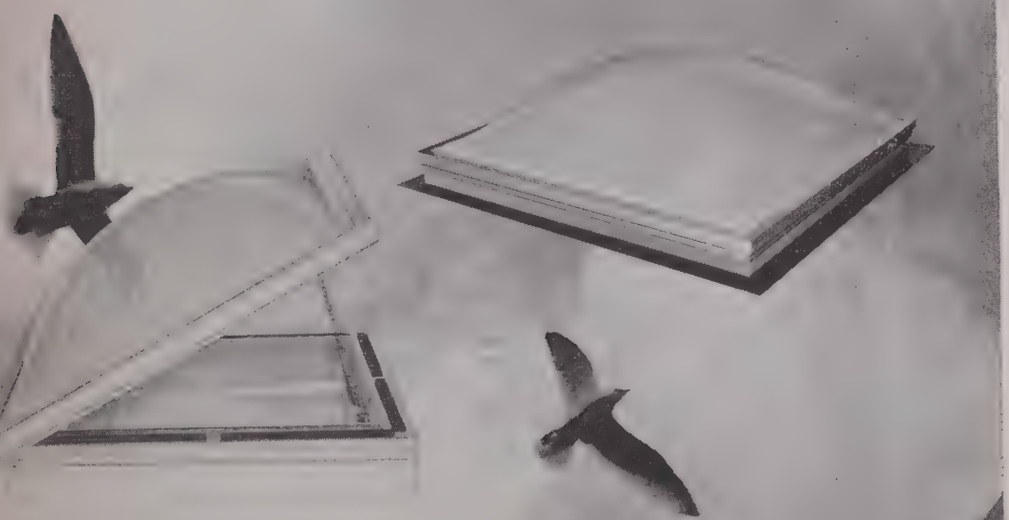
Manufacturers of Flexachrome*. . . Tile-Tex*. . . Vitachrome*. . . Holiday*. . . Mura-Tex*. . . Korkolor† . . . Holiday Flexachrome . . . and Modnar*, the plank-shaped asphalt tile.

*Reg. U. S. Pat. Off. †Trademark of The Flintkote Company

For better living...

Here are just four of our products, made of famous Wascolite Acrylic. All of them are designed to give you greater freedom of design . . . and to give your clients the most beautiful homes under the sun.

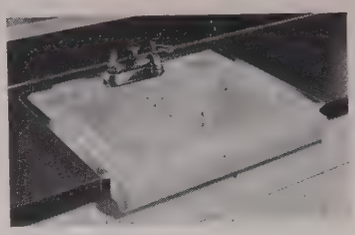
The **Wascolite Skydome** — famous prefabricated plastic unit for overhead daylighting. The **Wascolite Airdome** — overhead daylighting plus natural ventilation. The **Wascolite Showerwall** — safe, glamorous, inexpensive, tub enclosure of shatter-resistant acrylic. **Wasco Acrylite** — exciting embedments captured forever in shatter-resistant acrylic plastic. A new structural material for space dividers, screens, panels, sliding doors. Write for literature.





WASCO
PRODUCTS, INC.
Cambridge 38, Mass.

for further details check numbered coupon on p. 292



hh. Counter lavatory has front anti-splash rim, concealed front overflow, two integral soap dishes. Unit can be installed for flush back mounting with bar-type frames or built-in on three sides with U-type frame. Vitreous china comes in white or six colors to blend with almost any bathroom decor. Dual top mounting makes "Cynthia" lavatory easily adaptable to almost any specification, almost any bathroom arrangement. Price not given. Eljer Co., Pittsburgh 22, Pa.



ii. Cole Ven-ett combines a C.F.M. ventilator and capacious vanity in one unit. Rotary blower is powered with standard brand motor, 60 cycle, 110 v., to give window ventilation even when bathrooms are not on an outside wall. Mirror-doors (18" x 21½" ea.) are suspended on nylon rollers in enclosed tracks at top, slide easily. Colors are white and pastel with chrome and stainless steel trim. Unit fits rough opening 25-5/16" x 34". Price about $44.97 for one Ven-ett, 25 or more about $36 ea. Cole Mfg. Co., Austin, Texas.

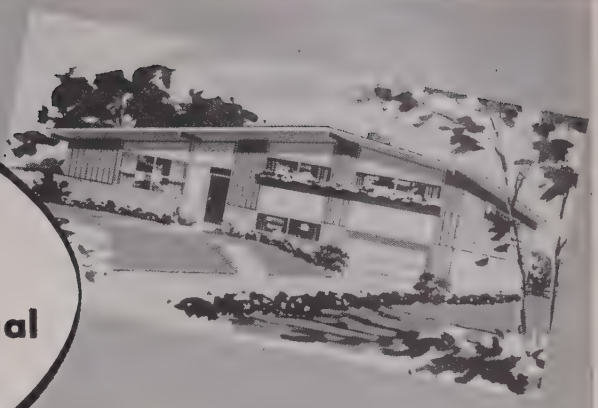


jj. Ceramic-on-steel wall tile, "Starfire", is guaranteed against crazing, cracking or color fading for a lifetime. Tile is washable, resistant to stains. It comes in a wide range of colors, installs directly on dry wall construction without additional sheeting or backing. Company has further simplified installation by packing all materials needed for tile bath in one box, including enough Starfire and adhesive for complete installation, so builder can order bathrooms by the box. Pepco Div., Bettinger Corp., Rehoboth, Mass.

continued on p. 268

AllianceWare

helps make possible these unusual homes at budget prices





TYPICAL HOMES IN PLYMOUTH MEETING PARK DEVELOPMENT

Architect:
Howard O. Krasnoff
Builders:
Fox-Bilt Homes, Inc.
Plumbing Contractor:
National Plumbing & Heating Co.
Plumbing Wholesaler:
H. B. Pancoast Co.



All Fox-Bilt Homes include these AllianceWare fixtures—*in color*—Champion Bathtub, Two Linda Lavatories and Two Closet Combinations



AllianceWare
PORCELAIN ON STEEL

Two Philadelphia builders—Bob and Dick Fox—have always dreamed of homes—priced within the reach of most families—that would contain many of the luxurious details generally found only in more expensive dwellings.

Today—in Plymouth Meeting Park—suburban Philadelphia—Fox-Bilt Homes, Inc. is erecting the first group of 315 unusual split-level homes containing many of the Fox Brothers' ideas.

Designed to sell at a low $14,850, these homes incorporate many luxury features . . . among them AllianceWare Champion bathtubs—two AllianceWare Linda lavatories and two closet combinations in each home. All AllianceWare fixtures are in color.

Fox Brothers chose AllianceWare, they tell us, because of AllianceWare's quality construction, decorator styling and wide color selection—sound reasons why they expect AllianceWare bathrooms to be an important sales feature of their unusual homes.

ALLIANCEWARE, INC. • Alliance, Ohio
Bathtubs • Lavatories • Closets • Sinks
Plants in Alli ance, Ohio; Colton, California; Kilgore, Texas

HURRY! HURRY! HURRY!

Step right up and order your

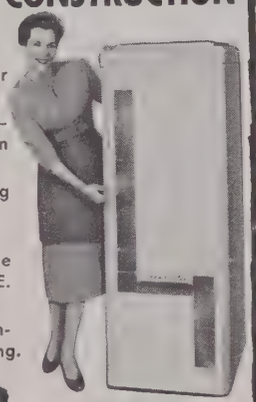
SHANA-Air

Water-Cooled and
Air-Cooled (Waterless)

AIR CONDITIONING

Featuring these star attractions for:

HOME MODERNIZATION
and
NEW HOUSE CONSTRUCTION



- Sales-Tested Shana-Air Selling Plan!
- Futura Designing—ideal for any home in any state.
- Precision Engineering (in compliance with U. L. standards).
- Ultra Performance (guaranteed at A.S.R.E. and A.R.I. standards).
- Simplified "A-B-C" installation and servicing.

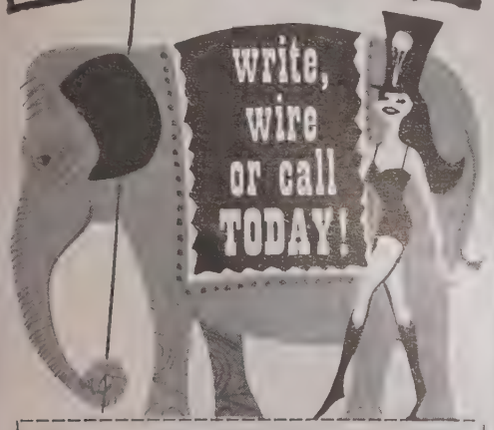
AIR-COOLED SAR and SAAC SERIES
Available in 2, 3 and 5 ton capacities

WATER-COOLED SW SERIES
Available in 2-3-4-6 ton capacities



PLUS these additional attractions:

- Shana "Duo" Units!
- Combination Units!
- Commercial Units!
- Winter Air Conditioners!



Please send me additional information about SHANA-AIR air conditioning. HH

☐ Cost of units
☐ Description of all air conditioning and heating equipment manufactured by Shana Manufacturing, Inc.

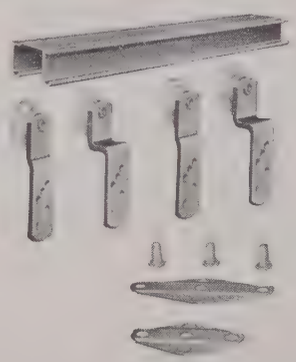
Name_____
Name of Firm_____
Nature of Business_____
Address_____
City_____ Zone____ State_____
Phone Number_____

SHANA MANUFACTURING, INC.
188 W. Randolph St., Chgo. 1, Ill., DEarborn 2-7030

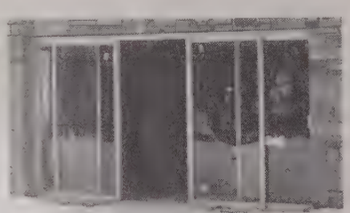
for further details check numbered coupon on p. 292



kk. Woodco sectional windows can be matched, stacked, used like blocks for any kind of arrangement you want. Sections are single light units that join for straight-line or bow-bay windows or a combination of both. Rotor operated awning unit, stationary unit and hopper unit can be mixed, matched in hundreds of combinations. Prices vary according to the type of unit, glazed, with Thermopane, and with storm panels. Manufactured by Rockwell of Randolph, Inc., Randolph, Wis.



ll. Thriftee Pak sliding door hardware accommodates both ¾" and 1⅜" door thicknesses. All you do is interchange hangers for ¾" or 1⅜" doors. Package includes aluminum track, steel hangers and two steel door guide plates (for each door size) with three nylon guides to be inserted through bottom of steel plate. With Pak, doors can be hung or removed after hangers are attached, and cannot jump the track. Five different sets for doors of various widths range from $5.50 to $11. Sterling Hardware Mfg. Co., Chicago, Ill.

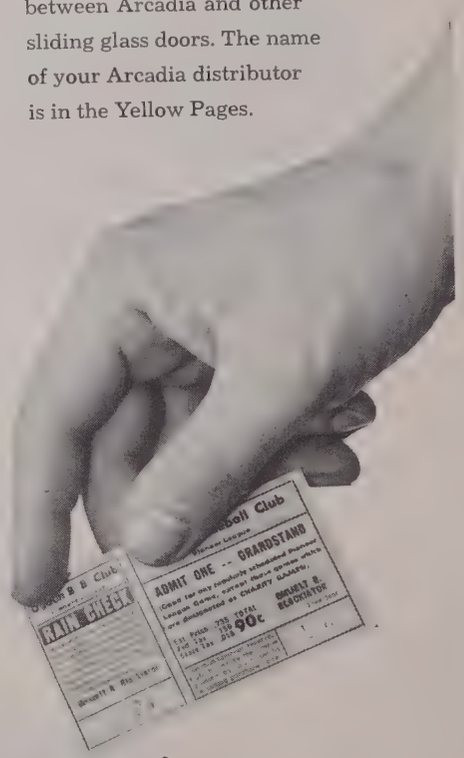


mm. **Sliding glass door-wall** is weather-sealed for year-round protection from weather. Constructed with heavy gauge, anodized extruded aluminum, unit needs no paint or upkeep. Its other features include easy sliding screens for summer months, built-in locks, Schlegel wool pile weatherstripping, sloping sill drains. Available in Thermopane, Twindow or plate glass. 4-panel unit 12′ x 6′-10″ costs about $372 in plate glass. 13′-½″ x 6′-9½″ Thermopane unit is about $422. Other sizes available. Modern Shower Door Co., Cleveland.

Technical Publications on p. 274

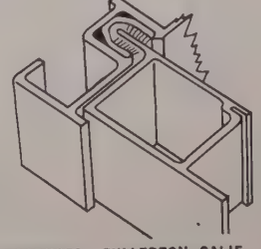
rain check...

is one way to describe the exclusive Twin-Seal Weatherstripping on Arcadia sliding glass doors. Deep, double wool pile strips grip the sliding panel on all four sides to lock out wind, rain, cold and dirt. Arcadia's moisture and abrasion resistant weatherstripping seals out unpleasant weather—yet allows smooth, effortless operation always. It's attention to precise details like this that makes the difference between Arcadia and other sliding glass doors. The name of your Arcadia distributor is in the Yellow Pages.



arcadia®

sliding glass doors



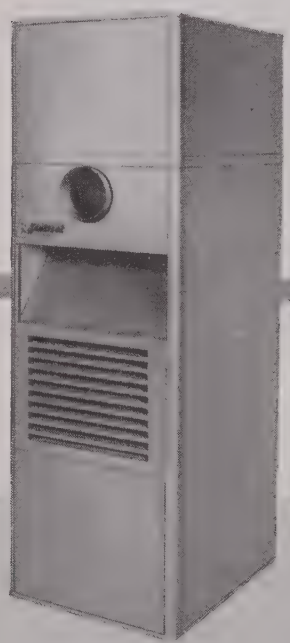
ARCADIA METAL PRODUCTS • FULLERTON, CALIF.
Distributors in Canada, Puerto Rico & throughout the U.S. • Natl. member Producers' Council, Inc., & Natl. Assoc. of Home Builders.
Help build a better America . . . See an architect

don't be saddled

by 'under-par' air conditioning . . .



protect your prestige and your profits with *Janitrol* quality!



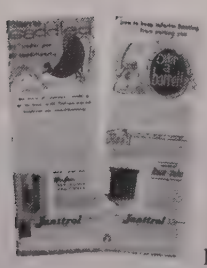
Identify yourself with Janitrol quality . . . cash in on a product that builds your reputation as a quality builder; conditions prospects for buying. And trouble-free, powerful Janitrol performance keeps buyers *sold*—protects your profits and your prestige. You do away with service calls for adjustment, repair and replacement of "under par" equipment that can so quickly ruin good will!

Janitrol builds a variety of year 'round heating-cooling conditioners, cooling units and furnaces with space-saving design, installation flexibility and capacities to assure top results in your homes. Don't gamble on under-par equipment. Talk over your air conditioning problems with your Janitrol representative. He'll help you plan air conditioning systems that meet all standards of National Warm Air Heating and Air Conditioning Association—yet are priced competitively!

New! *Janitrol* Win-Sum*matic*

YEAR 'ROUND CONDITIONER

Does a full-sized heating and cooling job in little as 4½ sq. ft. of floor space. Adaptable, saves space, installs easily in closet, alcove, utility room, basement. Up-flow and down-flow models. Clean, efficient gas heating. Air-cooled (waterless) cooling. Designed for easy addition of air-conditioning later, if desired, at modest cost. A powerful sales feature for your homes!



and remember, Janitrol backs you to the hilt with powerful national and local promotion. Right now, ads like these are influencing your best prospects—creating demand for quality Janitrol air conditioning in homes they'll buy! Ask your Janitrol representative for reprints, and other Janitrol merchandising aids. Or, write to us.

the best years of your business begin with...

®Janitrol

HEATING . . . COOLING

JANITROL HEATING & AIR CONDITIONING DIVISION
SURFACE COMBUSTION CORPORATION • COLUMBUS 16, OHIO
IN CANADA: MOFFATS, LTD., TORONTO 15

America's Pioneer...

Tub enclosures

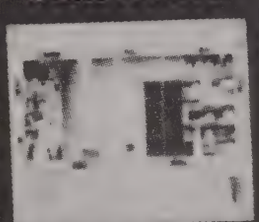


★ Custom or stock
★ 7/32" - 1/4" glass
★ Drop-in header bar locks panel in place
★ Wall jambs self-adjust to out-of-plumb wall conditions up to 9/16"

Here is America's finest quality . . . competitively priced. Whether it's a stock model to fit recessed tubs or a custom job for neo-angle tubs GLASHCO makes it . . . better.

. . . is still . . .

Medicine cabinets



★ Mr. & Mrs. king size
★ Sliding mirror doors of 1/4" electrolytic plated mirrors
★ Chromyte finish frames

A GLASHCO origination . . . often copied . . . but never duplicated. Three stock sizes or custom built ANY size.

. . . your best buy . . .

Sliding glass walls



★ Sold K.D. or fully glazed with 1/4" plate
★ Panels move easily, silently on heavy duty roller bearings
★ Neoprene rubber positive weather protection

For latest catalog & price lists write TODAY to

Glass
SHOWER DOOR CO., inc.
105 W. Wacker Drive - Chicago 1

Technical Publications

for further details check numbered coupon p. 292

BUILDING MATERIALS

444. Reinforced with Welded Wire Fabric. Wire Reinforcement Institute, Inc., Dept. HH, Washington, D. C. 16 pp.
Steel wire as reinforcement for concrete in every phase of home building—from driveways to swimming pools and play areas.

445. Tectum. AIA File No. 37-B-1. Tectum Div., Peoples Research and Mfg. Co., Dept. HH, 152 S. 6th St., Newark, Ohio. 16 pp.

1956 general design manual for Tectum wood fiber roof decks. Application methods for various framing systems, design details, specifications, material properties.

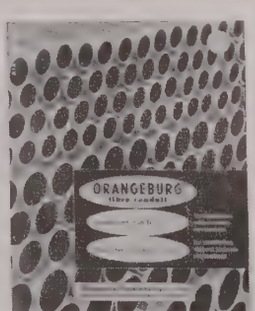


* How to Modernize Your Home. The Ruberoid Co., Dept. HH, 500 Fifth Ave., New York 36, N. Y. 20 pp. 25¢.
A worthy addition to Operation Home Improvement files with how-to information on up-dating exterior and floor plans.

447. Reference Manual. Ohio Lime Co., Dept. HH, Woodville, Ohio. 24 pp.
The story of lime from manufacture to use with specifications, application data.

448. Data file. North Electric Co., Dept. HH, Galion, Ohio.
Automatic private communication systems with descriptions of special features of "Privatel" exchanges. Data sheets.

449. Catalogue. Minnesota Mining & Mfg. Co., Adhesives and Coatings Div., Dept. HH, 411 Piquette Ave., Detroit, Mich. 12 pp.
Applications for adhesives, coatings and sealers in metalworking, transportation, general manufacturing, electrical manufacturing and building products.



450. Catalogue 52. Orangeburg Mfg. Co., Inc., Dept. HH, Orangeburg, N. Y. or Newark, California. 12 pp.
Fiber conduit, its uses and advantages as an underground protective raceway for electric cables.

451. Ceramic Tile. Catalogue 206. American-Olean Tile Co., Dept. HH, 1000

continued on p. 280

More Usable Space in the Very Same Place!



with

KennatracK®
SLIDING DOOR HARDWARE

SLIDING DOOR HARDWARE

Plan more room in every room the Kennatrack way. Kitchen, bedroom, bath —all through the house Kennatrack's complete line answers every need.



Take the guesswork out of Sliding Door Installations
Select the right hardware for every interior use from Kennatrack's easy-to-use Buyer's Guide. Write for your free copy.



KennatracK®
CORPORATION
ELKHART, INDIANA
In Canada: Toronto, Ontario

INSULATED HOME SAFE

the most exciting builder's item to hit the market in a long, long time

a modern necessity that gives any home new appeal and security

FOR NEW OR EXISTING HOMES, APARTMENTS, HOTEL ROOMS, CABINS, COTTAGES, OFFICES

- Wall and Floor models fit between standard studs and joists.
- Low price. Economical and easy to install.
- 741 cubic inch capacity. Convenient safety for insurance policies, wills, deeds, etc.
- Guaranteed by Yale—famous for combination bank locks, safety deposit boxes.

YALE & TOWNE

*YALE REG. U. S. PAT. OFF.

Let the Yale home safe help sell your homes. Tell your prospects this:

"It's a brand new item. Made by Yale, foremost name in security."
"The Yale Wall Safe can be concealed behind a picture on the wall."
"Nothing like it to keep your important papers safe and secure."

For full details write to: THE YALE & TOWNE MFG. CO.
LOCK & HARDWARE DIVISION, WHITE PLAINS, N. Y.

What sizes of

ONAN Portable Electric Plants

are best for your jobs?



10 KW ONAN *provides power for 5 H. P. saw or several crews*



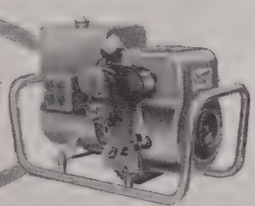
Powered by two-cylinder, air-cooled gasoline engine. Available housed and with trailer as shown. Similar model in 7½ KW capacity.



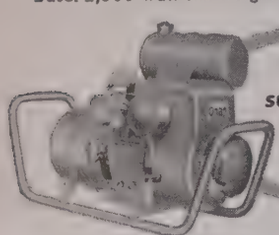
5 KW ONAN *for crews on 3 or 4 homes*

Two-cylinder, air-cooled, gasoline engine. 4 plug-in receptacles. With carrying frame, on dolly, or with plain base. Also in 3,500 watts A.C.

2 or 2½ KW ONAN *powers electric tools for 2 crews*



One-cylinder, gasoline engine. 4 plug-in receptacles. With carrying frame, dolly-mounted or plain base. 2,500-watt unit weighs only 139 pounds.



1 or 1½ KW *supplies power for single crew*

Compact, lightweight. One-cylinder, gasoline engine. With carrying frame, rubber-tired dolly or plain base. Also 500 and 750-watt models.

Onan portable electric plants combine 4-cycle quick-starting and long life with compactness and lightweight. Completely Onan-built, with Onan short-stroke engines and Onan generators. Other models to 50,000 watts.

Write for portable plant folder or see your Onan distributor.

Onan ELECTRIC PLANTS

D. W. ONAN & SONS INC.

3202 Univ. Ave. S. E., Minneapolis 14, Minn.

Technical Publications

for further details check numbered coupon p. 292

Cannon Ave., Lansdale, Pa. 24 pp.
Tile colors, patterns, panels, designs for use all over a house.

452. Atlas Compo Forms. Irvington Form & Tank Corp., Dept. HH, 20 Vesey St., New York 7, N. Y. 16 pp.
How to save time and labor with light weight, interchangeable, high strength Compo forms for use in concrete construction.

ACCESSORIES



453. Deltox rugs and carpets. Armstrong Cork Co., Floor Div., Dept. HH, Lancaster, Pa. 16 pp.
If you're shopping for a model house, take a look at the carpet styles shown here. Sizes, colors, descriptions.

454. Truscon Easy One-Coat. Truscon Laboratories, Dept. HH, Detroit 11, Mich. Color card.
A ready-mixed masonry waterproofing for masonry coating in 8 handsome colors. Coating requires no pre-wetting of surface, no mixing of dry powders and water. For use indoors and out on concrete, cinder and slag blocks and bricks, etc.

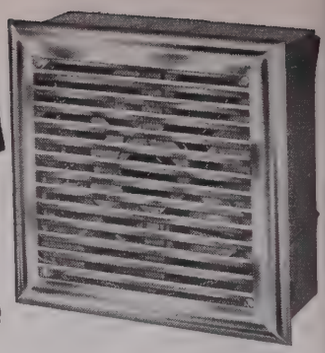
* Guide to Hi-Fi Loudspeakers. Jensen Mfg. Co., Dept. HH, 6601 South Laramie Ave., Chicago, Ill. 36 pp. 50¢.
Manual A-1060 contains selection charts basic components, installations, cabinets to aid you in putting in the correct reproducing system.

456. California Coordinates. A joint booklet from Gladding, McBean & Co., Dept. HH, 2901 Los Feliz Blvd., Los Angeles, and W. P. Fuller & Co., Dept. HH, 222 N. Ave. 23, Los Angeles. 8 pp. folder.
Matched designs in glazed ceramic tile and wallpaper, issued by the manufacturers named above, in five basic designs and 11 color combinations. Use them in kitchens, baths, entranceways—wherever you want to carry out coordinated pattern and color.

457. Bulletin 222. Electro-Voice, Inc., Dept. HH, Buchanan, Mich. 4 pp. folder.
Hi-Fi amplifiers with data, specifications, and prices.

* Color Magic with Consoweld. Consoweld Corp., Dept. HH, Wisconsin Rapids, Wis. 30 pp. plus inserts. $1.75.
An important book based on the Cheskin system of related and contrasting colors. Six pair of complimentary color charts with pure color, tint, tone, shade. Illustrations of rooms and how to change them with color. Notes on Consoweld, its many

continued on p. 286



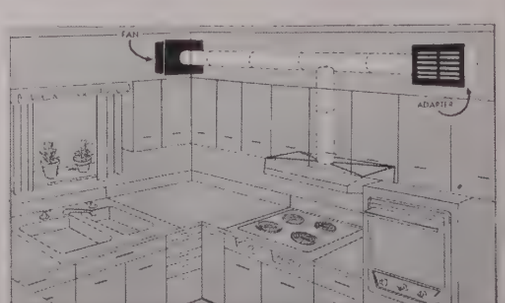
Upgrade the value of your kitchen with a *Broan Motordor Fan*



Cash in on the sales excitement of the Broan automatic door

Wherever obvious quality is essential and basic dollar counting a necessity — a Broan Motordor Fan is your first choice for a kitchen, especially a built-in kitchen. Here *one* Broan fan with economical stove pipe ducts and adapters can do the work that two fans should otherwise be called on to do. This innovation — and one application is illustrated here — provides effective ventilation for the kitchen. It upgrades the value of your work, just as the Broan Motordor upgrades the service of the fan. When the motor is turned on, the door opens automatically . . . and it closes automatically when the motor shuts off . . . a patented feature that fascinates all homemakers.

Write for the name of the Broan distributor in your area and for a factual bulletin that details and illustrates all of the engineering firsts that make Broan fans superior.

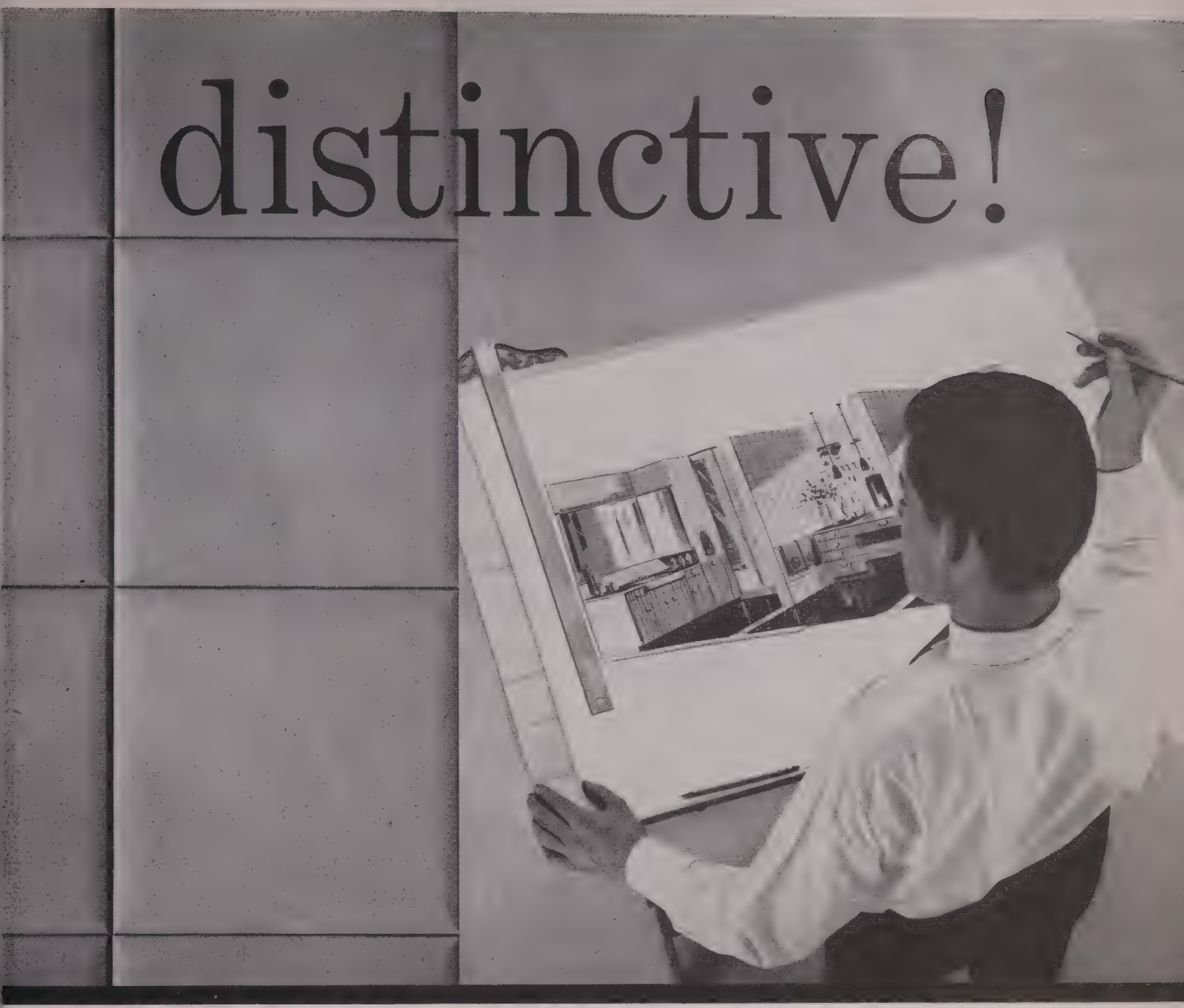


Broan makes a complete line of fans for residential and commercial applications. See Sweet's file for 1956 — or write for a free catalog.

Broan MFG. CO., INC.

1679 N. Water Street, Milwaukee 2, Wisconsin

distinctive!



Homes look richer when interiors are decorated with styrene wall tile in Granite Tone colors!

Entirely new concepts in building and construction are forecast for plastics in the near future as the result of current research in many areas. Out of this exploratory work may well evolve a broadened functional use of plastics for exterior and interior walls, and even entire housing units.

Meanwhile, exciting new decorating effects are now possible through recent coloring developments in plastic wall tile. Dramatic depth of color and texture, for example, is added to all the well-known advantages of plastic wall tile through these new color tones which are being featured by leading manufacturers of plastic tile in their new lines.

Granite Tone Colors. Plastic wall tile in new coloring effects developed by Monsanto color research has a depth of tone and richness desired by homeowners. Tiles molded in these new "Granite Tone" colors have the textured beauty of polished granite to create handsome, luxurious bathrooms and kitchens. The development of these "Granite Tone" colors was pioneered by Monsanto, a major supplier of styrene plastic from which guaranteed-quality tile is molded.

Coming soon! Another new Monsanto styling project promises to further extend the decorating uses of plastic wall tile. The design possibilities of tiles molded in unusual shapes—triangles, trapezoids and curved forms—are being explored, and forecast a wider use of plastic tile.

Plastics in construction—Because of the increasing interest in plastics as basic materials in construction, Monsanto has formed a Structural Plastics Engineering Group to study the functional uses of plastic materials. Architects and builders are invited to write for counsel on technical aspects of plastics for building and construction.

A NEW REPORT, "Plastics in Housing," has recently been published by the Department of Architecture of The Massachusetts Institute of Technology. The M. I. T. study was made possible by a Monsanto grant-in-aid. Copies are available at $2.00 each. Address Monsanto Chemical Company, Plastics Division, Room 505, Springfield 2, Mass.

MONSANTO

Another LESLIE EXCLUSIVE!

LESLIE "C" SERIES FIXED LOUVER

for 2/12, 2½/12 or 3/12 PITCH

Now — Leslie introduces a completely new idea in louver design — the unique "C" Series fixed louver which can be assembled for 2/12, 2½/12 or 3/12 pitch in a few minutes.

The "C" Series louver has the structural strength and ease of installation of conventional fixed louvers which fit only one pitch.

Shipped two louvers per carton, the "C" Series Louver is the versatile answer to a long-standing need for *really low pitch* louvers at minimum unit and storage cost.

- One model in four sizes to 140" base
- Can be used at 2/12, 2½/12 or 3/12 pitch
- Aluminum or galvanized steel
- Ship K-D. Assembled in 7 minutes

ALUMINUM Model No.	GALV. STEEL Model No.	OPENING DIMENSIONS AT 2½/12 Base Height	OPENING DIMENSIONS AT 3/12 Base Height	FREE AREA* (sq. in.) AT 2/12	2½/12	3/12
C4A	C4	81⅞" 6¾"	79⅝" 8¼"	57	79	106
C5A	C5	101 " 8⅜"	98 " 10¼"	106	145	194
C6A	C6	120⅞" 10 "	117 " 12¼"	171	232	309
C7A	C7	140 " 11⅝"	136 " 14¼"	252	340	450

LESLIE WELDING CO.
INCORPORATED
2943 West Carroll Avenue
Chicago 12, Illinois

Proud of your houses?

Then use them to win fame and fortune.

Enter your best designs for House & Home's "Hall of Fame Awards." The best 57 houses the Editors can find will be published in October.

57 HOUSES FOR '57

57

The winning houses will also be exhibited at the National Housing Center in Washington, at the Chicago Homebuilders' Show and some will be shown on coast-to-coast TV programs.

Deadlines for photographs is July 15. No strings attached, easy to enter.

Technical Publications

for further details check numbered coupon p. 292

designs and patterns—all keyed to the color ideas.

459. 1956 Color Chart. Asphalt Tile Institute, Dept. HH, 101 Park Ave., New York 17, N. Y. 4 pp. folder.
The principal manufacturers of asphalt tile and the colors and patterns available in each manufacturer's line. New terrazzo and cork patterns have been added this year, plus some 26 regular plain and marbleized colors.

EQUIPMENT



460. 25 Feet per Minute . . . Parsons Co., Dept. HH, Newton, Iowa. 16 pp.
Catalogue of the performance, design and features of Parsons' new wheel-type Trenchliner—Model 150.

461. Catalogue 560. Stow Mfg. Co., Dept. HH, 277 Shear St., Binghamton, N. Y. 16 pp.
Concrete equipment — vibrators, portable concrete grinders, vibrating screeds and rotary trowels. Accessories and atttachments; information and specifications.

462. Van-Packer Chimney. AIA File No. 5-H, Bulletin RS 1, Van-Packer Corp., Dept. HH, Bettendorf, Iowa. 8 pp.
The packaged masonry chimney with all its latest improvements. Application, installation procedures, specifications.

463. Universal Ultra-Matic. Universal Insulating Machine Co., Dept. HH, Van Wert, Ohio. 4 pp.
Ultra-Matic insulation blowing machine, its features, operating data, model specifications and illustrations.

464. Baseboard Radiation. The Rittling Corp., Dept. HH, Buffalo 5. N. Y. 12 pp.
Custom and prefab baseboard radiation with pictures, ratings, specifications, typical piping layouts.

465. Catalogue AP 237-F. Pacific Steel Boiler Div., Dept. HH, National-US Radiator Corp., Johnstown, Pa. 44 pp.
Pacific steel boilers, their ratings, capacities, dimensions and engineering data—in a thorough book that covers the complete line.

466. Naturalite dome skylights and ceiling domes. Plastic Products of Texas, Dept. HH, 5115 E. Grand Ave., Dallas. 12 pp.
Plexiglas domes—tough, shatterproof, resistant to weather. Specifications, sizes.

continued on p. 292



Homes constructed by
Palmer & Krueger, Kenosha, Wisconsin

Magnesium Forms Speed Work on Kenosha Jobs

Jim Krueger of Palmer & Krueger, Kenosha, Wisconsin says that after several days rain which left the ground muddy and substantial water in the excavation, his men were still able to strip Symons Magnesium Frame Plywood Forms from one job, load them on a truck, and take them to another job at the other end of town, unload them and set them up ready for pouring by 1:30 P.M.

ACTUAL SET-UP TIME—2 HOURS

The foundation was 30' x 42' with window bucks and brick ledge. Walls were 7 feet high and 10 inches thick. Jim Krueger credits the fast set-up to Symons Lightweight Magnesium Frame Plywood Forms and his crew of 4 experienced men.

90 USES PER SET PER YEAR

Palmer & Krueger has two sets of Symons Magnesium Frame Plywood Forms. They pour an average of 6 foundations per week. Before each use, the forms are oiled with a horse hair window brush that has a six foot handle. Forms set up one day are always stripped the following morning. Time required for stripping is approximately one hour.

FREE ENGINEERING SERVICE

Upon receipt of your plans our engineering staff, which is experienced with all types of forming, will furnish complete form layouts and job cost sheets on your form work—at no charge or obligation. Our salesmen are always available for consultation and to give advice on form erection, pouring and stripping methods. Builders throughout the country use this service to their benefit and profit.

Rentals—Symons Forms, Shores and Column Clamps may be rented with purchase option, all rentals to apply on purchase price.

Symons

SYMONS CLAMP & MFG., CO.
4277 Diversey Avenue, Chicago 39, Illinois, Dept. F-6

Please send complete information on Symons Plywood Forms in Magnesium Frames.

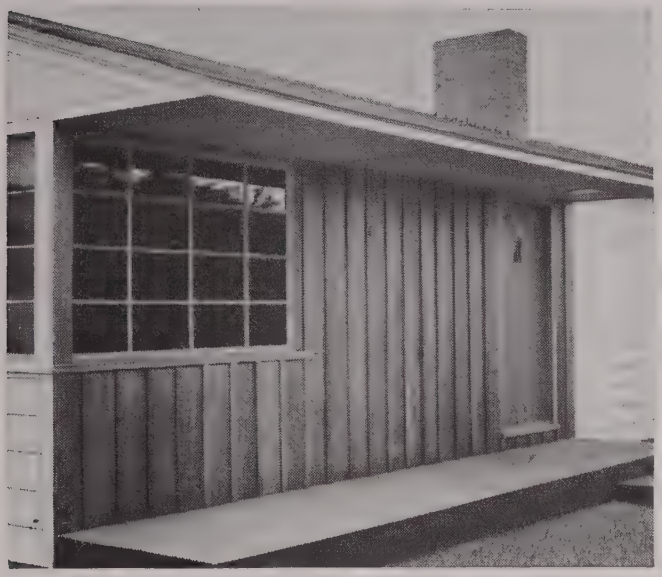
Name_____

Firm_____

Address_____

City_____ Zone____ State_____

take a good look at WESTERN RED CEDAR



one of 10 woods from the

WESTERN PINE region

Great resistance to decay, dimensional stability, high insulating qualities, workability, nailability, light weight make Western Red Cedar an excellent and economical wood for all residential construction—and preferred for weather-exposed usage such as poles, greenhouses, boats and floats.

Western Red Cedar comes in **3 select and 5 common grades.** You can order it in mixed cars—together with other woods from the Western Pine region—from most Western Pine Association member mills!

the Western Pines
- IDAHO WHITE PINE
- PONDEROSA PINE
- SUGAR PINE

the Associated Woods
- RED CEDAR
- LARCH
- DOUGLAS FIR
- WHITE FIR
- ENGELMANN SPRUCE
- INCENSE CEDAR
- LODGEPOLE PINE

RED CEDAR

get the facts to help you sell WESTERN RED CEDAR

write for the FREE illustrated booklet to WESTERN PINE ASSOCIATION, Dept. 319-V Yeon Bldg., Portland 4, Oregon

TODAY'S WESTERN PINE TREE FARMING GUARANTEES LUMBER TOMORROW



Ladies love the luxury look...



builders love the cost!

The luxury look of a *Mutschler Kitchen* is not the result of dollars . . . but ideas.

After all, how much dough can you put into a cabinet, even a superior product like Mutschler? It makes one whale of a difference, though, how you put your kitchens together. And, of course, a great deal depends on what functions the cabinets perform.

Mutschler makes cabinets for any built-in appliance of any manufacture . . . cookery, refrigeration, laundry and the rest. Wall and floor cabinets also provide dozens of latest work-saving features the ladies love.

Why Mutschler? One word sums it up . . . experience. Since 1893, in fact.

High budget, low budget (building or remodeling) if you'd like to give your kitchens that luxury look, send along the coupon. Let's see if we can't get together.

Mutschler KITCHENS

MUTSCHLER BROTHERS CO.
Dept. 6656 Nappanee, Indiana

We'd like to talk about getting a luxury look in our kitchens.

NAME_____

FIRM_____

ADDRESS_____ PHONE_____

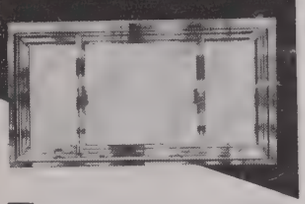
CITY & STATE_____

for the contemporary home
Specify
these ULTRA-MODERN



Alpride
Horizontal Sliding
ALUMINUM WINDOWS





- Non-corrosive Heliarc Welds add strength.
- Positive locking device provides homeowner with fullest safety and protection.
- Wide precision grooved channels allow windows to slide with fingertip operation assuring minimum air infiltration.
- Built-in drain boxes with sills sloped 8° plus properly spaced weep holes assure drainage away from building.

These most advanced READY-TO-INSTALL horizontal aluminum sliding, picture or double hung windows are designed and fabricated for Quality, Beauty and Ease of Operation. Available with integral fin-trim or for wood buck installation

Horizontal sliders in 29 sizes. picture windows in 12 sizes.

and Alpride
Sliding
ALUMINUM DOORS

- Precision engineered and fabricated by craftsmen.
- Add Dramatic unsurpassed beauty to your homes.



Alpride
PRIME WINDOWS
WEATHER WIZARD
TM

Contact Alpride today for complete product catalogue and cost information... and name of your nearest distributor.

Division of
WEATHER WIZARD ALUMINUM MFG. CORP.
FULTON & STEWART AVENUES
Garden City Park, N. Y.

467. AIA file 30-B-1. Pioneer Mfg. Co., Dept. HH, 3131 San Fernando Road, Los Angeles 65. 1 p.

Gas-fired, forced air furnaces plus the features, dimensions and specifications of highboy and counter-flow models. Four new models have been added to the line, are now restyled in new colors.

468. Marcolite skylights. The Marco Co., Dept. HH, 45 Greenwood Ave., East Orange, N. J. 8 pp.

Marcolite aluminum and fiber glass panel skylight—a prefabbed, preassembled unit.

469. Hinges for Light Construction. McKinney Mfg. Co., Dept. HH, 1715 Liverpool St., Pittsburgh, 33, Pa. 4 pp.

A representative selection of hinges available for residences, stores, etc. Also forged iron builders' hardware.

470. Sanitoi, the sewerless toilet. Sanitoi Inc., Sewerless Sewage Systems, Dept. HH, 404 North St., Lafayette, Ind. 4 pp. Diagrams and descriptions of the Sanitoi sewerless toilet with notes on its components, descriptions of how the system works, general information, maintenance, etc.

PRODUCTS AND PUBLICATIONS COUPON

For more information on new products and publications in this June issue check key numbers below and mail to:

House & Home

9 Rockefeller Plaza, New York 20, N.Y.

NEW PRODUCTS

A. Shur-Set fastening tool ☐
B. Titeflex 500 tubing ☐
C. Grand Screen houses ☐
a. GE square socket ☐
b. Emerson attic fan ☐
c. Janitrol cooling system ☐
d. Emerson casement air conditioner ☐
e. Servel year-round air conditioner ☐
f. Perfection Hi-Boy furnace ☐
g. Recold air conditioner ☐
h. Frigidaire air conditioner ☐
i. Winkler condensing unit ☐
j. Master Framing Rule ☐
k. Dish-Quik ☐
l. Push-button Spotnailer ☐
m. King calking compound ☐
n. D-P rope calk ☐
o. Air Dri ☐
p. Dandie concrete mixer ☐
q. Porter-Cable trimming kit ☐
r. White T-3 troweler ☐
s. Bennett-Ireland fireplace form ☐
t. Conolite panels ☐
u. Republic Steel cabinet ☐
v. Maytag washer and dryer ☐
w. Revco built-in refrigerator ☐
x. Hotpoint two-door oven ☐
y. Brammer cabinets ☐
z. Berns range hood ☐
aa. Admiral hideaway cooking top ☐
bb. Lockhart snap-on gutter guard ☐
cc. Leigh dryer-vent ☐
dd. Layne & Bowler package pump ☐
ee. Wasco acrylite panels ☐
ff. Harris parquet floor ☐
gg. KenCork floor tile ☐
hh. Eljer counter lavatory ☐
ii. Cole Ven-ett ☐
jj. Starfire wall tile ☐
kk. Woodco sectional window ☐
ll. Thriftee Pak hardware ☐
mm. Modern Shower Door door-wall ☐

TECHNICAL PUBLICATIONS

444. Wire Reinforcement booklet ☐
445. Tectum AIA File ☐
447. Ohio Lime manual ☐
448. North Electric data file ☐
449. Minnesota Mining catalogue ☐
450. Orangeburg catalogue ☐
451. American-Olean tile book ☐
452. Irvington Atlas Compo Forms ☐
453. Armstrong Deltox rugs ☐
454. Truscon Easy One-Coat ☐
456. California Coordinates ☐
457. Electro-Voice bulletin ☐
459. Asphalt Tile color chart ☐
460. Parsons Trenchliner ☐
461. Stow catalogue ☐
462. Van-Packer chimney ☐
463. Universal Ultra-Matic ☐
464. Rittling baseboard radiation ☐
465. Pacific Steel Boiler catalogue ☐
466. Naturalite dome skylights ☐
467. Pioneer Mfg. AIA file ☐
468. Marcolite skylights ☐
469. McKinney hinges ☐
470. Sanitoi Sewerless toilet ☐

* For information about unlisted Technical Publications see below.

NAME _____

OCCUPATION _____ TITLE _____

FIRM _____

STREET _____

CITY _____ STATE _____

IMPORTANT:

House & Home's servicing of this coupon expires August 31, 1956

** Any inquiries with money or check enclosures must be addressed directly to the manufacturer.*

In addressing direct inquiries, please mention

House & Home

and the issue in which you saw the product or publication.

I wish to enter a subscription to **House & Home** *for* *1 year, $6* ☐ *2 years, $8* ☐
US and possessions and Canada only

☐ *New* ☐ *Renewal* _____
Signature

NuTone Hood-Fans



TRAP 31% MORE

*Cooking Heat, Odors, Grease and Steam**

Extra Depth Reaches to Front Burners of Range



* Over 80% of all frying and cooking is done on the front burners of the range . . . and NUTONE'S FULL-SIZE RANGE HOODS reach out to trap ALL greasy vapors.

Other "Skimpy Hoods" permit almost half of these vapors to escape into the kitchen . . . then to other parts of the house. And NuTone's curved-front allows a smooth flow of air currents without square corners to cause "grease-pockets".

3 different styles . . . with choice of 6 different NuTone Exhaust Fans

4 colors . . . 24"-30"-36"-42" sizes to fit any cabinet . . . any budget

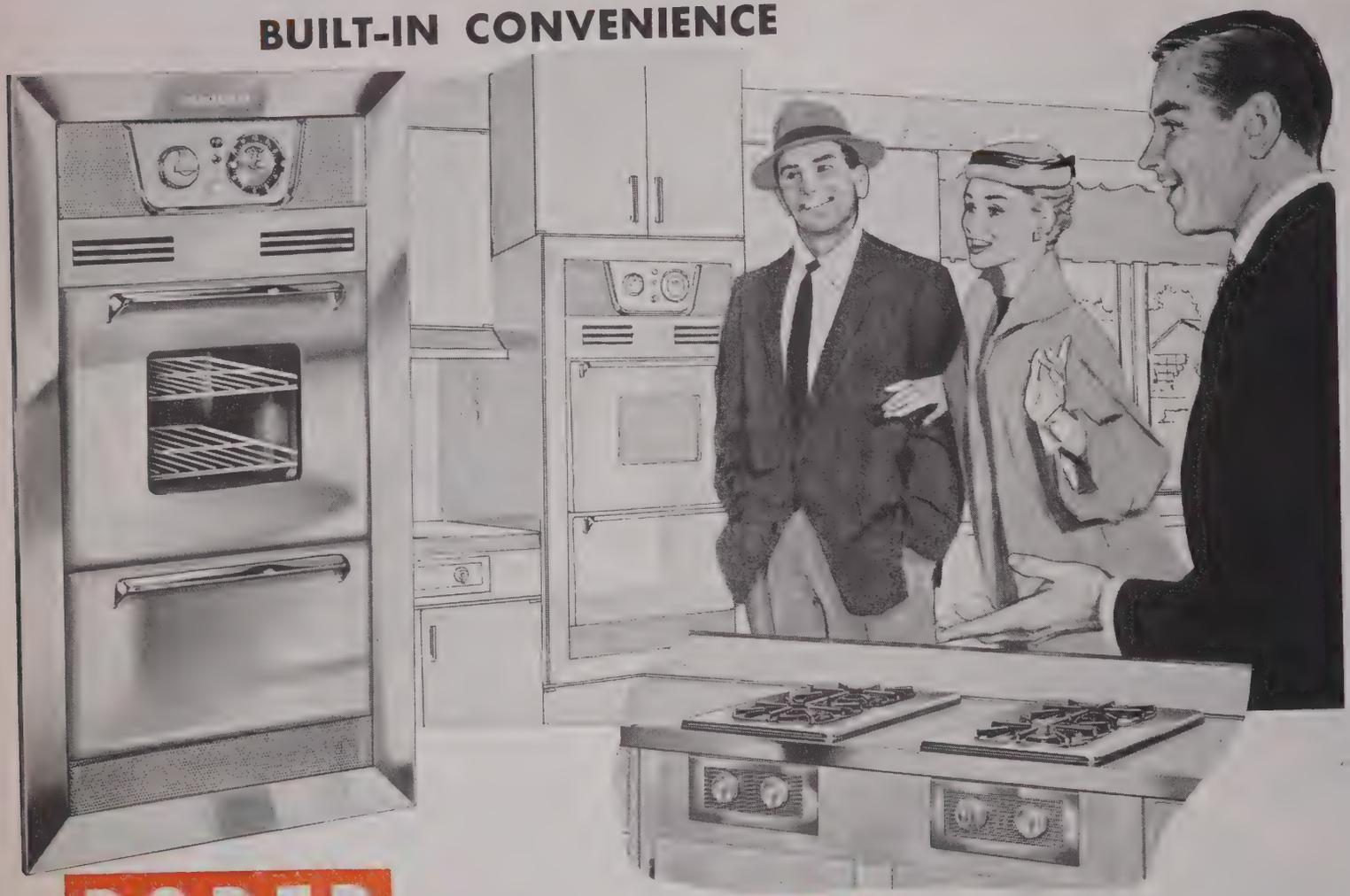
FREE CATALOGS . . . Write NUTONE, INC., DEPT. HH-6, CINCINNATI 27, OHIO

Extra Volume Prevents Vapors from Spilling Out

SELL HOMES FASTER!



WITH ROPER QUALITY, BUILT-IN CONVENIENCE



ROPER
"arRANGEable"

BUILT-IN GAS Ranges

featuring Roper Tem-Trol automatic top burner

- Makes any ordinary utensil automatic
- Controls the heat, ends pot-watching
- Banishes boil-over, prevents scorching
- Most accurate and dependable automatic top burner in the built-in field

In your homes, Roper "arRANGEable" units will boost sales, insure profits, please your customers. Prospects appreciate famous Roper quality. They know advanced Roper features mean truly modern cooking. Housewives love the smart styling, the wide new choice of decorator colors. Install Roper and you'll sell your homes, faster. Get complete details now.

SEND IN THE COUPON

or see your
BUILDING MATERIAL DEALER
GEO. D. ROPER CORPORATION
Rockford, Illinois

Dept. HH656

Geo. D. Roper Corporation
Rockford, Illinois

Rush me full information on Roper "arRANGEable" built-in gas ranges.

Firm Name_____
Individual_____
Address_____
City_____ State_____
I am a_____
(type of business)
My supplier is_____
(Name) (Address)

HOUSE & HOME, June 1956. Volume 9, Number 6. Published monthly by TIME INC., 9 Rockefeller Plaza, New York 20, N. Y. Entered as second-class matter at New York, N. Y. Subscription price $6.00 a year.



"We* made our houses excitingly different for less than $100."

*Ocean Lea Builders, Gene Ballin, Murray Glicksman and Ross Langsfur inspect the "years-ahead" electrical luxury built into their new model home at Oceanside, Long Island.



Competition is fierce in Long Island's Nassau County. So when an electrical contractor offered these promotion-minded builders REMCON *remote control lighting* for their new 400 home development at practically no increase in cost, they gave him the go-ahead.



Remcon master control being installed in bedroom. It will enable the home-owner to put lights on or off throughout the house from bedside. If baby cries at night, this Master Control lights up nursery and hall instantly.



This 3-position switch at stair will control light in living room, in entrance foyer and at top of stairs. You can put as much or as little REMCON switching into your houses because each REMCON circuit is completely independent.



Installing entrance light which is controlled from REMCON switches in kitchen and upstairs bedroom. Electrical contractors like the unique REMCON relay because of its built-in transformer. This means trouble-free installations at low cost.

REMCON simplified remote-control switching adds so much sales appeal to your houses and so little to the cost. Send us the floor plan of any home you now have under construction or plan to build soon. We'll send you a complete remote-control switching plan. Naturally there's no obligation. Write today to: REMCON division, Pyramid Instrument Corporation, Lynbrook, New York.



So you think you've seen

BATHROOM VANITIES?



You've never seen anything like NATIONAL VANITY'S stunning new REGENCY line. So elegantly designed and fashioned, they look like expensive custom-built pieces. Actually they're mass-produced to save you money and to make money for you. They've taken builders by storm. For the first time, here are brand new decorator-styled vanities surfaced with genuine Formica ...with matching, sliding mirror-front, Formica medicine cabinets.

The vanities are cleverly sloped to allow plenty of leg room. The sliding doors are crafted of sparkling LUSTERITE ®* that slide easily with the touch of a finger. One or two sink cut-outs. Even wonderfully convenient cosmetic boxes.

Could you ask for anything more? Of course! NATIONAL VANITY'S colorful new brochure. Write for it Now!

See the complete REGENCY line, the popular MODERN line, the enticing CLASSIC. Never before has *one* producer offered so much to builders—so economically.

Send for your color brochure today.

National Vanity

167 Avenue A, Bayonne, New Jersey • HEmlock 6-8200

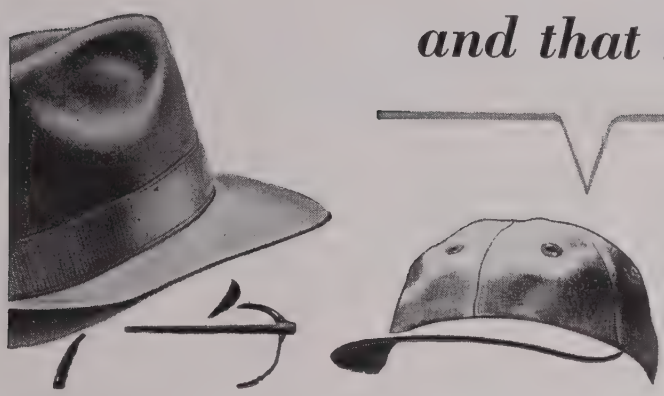
For Kitchen Cabinets, write NATIONAL KITCHENS • For Built-In Ovens, write NATIONAL STOVE • Bayonne, N. J.

MANUFACTURERS REPRESENTATIVES: SOME SELECT TERRITORIES STILL OPEN. WRITE.

*Corrugated fiber glass panels with textured crinkle finish.

"When you can get a premium glass at no premium in price..."

"Sure, why not use it— and that means AMERICAN!"





AMERICAN PRODUCT LINE

American manufactures sheet glass with the least distortion and the greatest clarity, whiteness and luster.

LUSTRAGLASS—single and double strength for ordinary glazing.

LUSTRACRYSTAL—economical heavy sheet glass for larger openings and special applications.

LUSTRAWHITE—a picture glass of exceptional clarity and flatness.

LUSTRAGRAY—for better television viewing.

BULB EDGE GLASS—for use as counter dividers, wind deflectors and shelves.

THIN GLASS—for microscope slides and covers. Extremely flat and true to tolerance.

SUPRATEST—a laminated safety glass.

PANAL—a fiberglass-reinforced plastic structural panel.

WATCH OUR PRODUCT FAMILY GROW

The man-with-the-pipe is right! The more glassed-in areas there are on your projects, the more important it becomes to use the whitest, clearest, most lustrous glass you can find. And that *does* mean American LUSTRAGLASS or LUSTRACRYSTAL—for top quality at no extra cost.

• Prove it for yourself on your next job. Ask your American distributor how LUSTRAGLASS can give your client the benefit of more light transmission, and afford the least amount of distortion over large areas . . . how LUSTRACRYSTAL can save you as much as 35% in many applications. *Look in your Phone Directory for the name of the American distributor in your territory.*

WSW 6049

For the finest quality in **MODERN GLASS**

Use American

Made by **the AMERICAN WINDOW GLASS CO., PITTSBURGH, PA.**

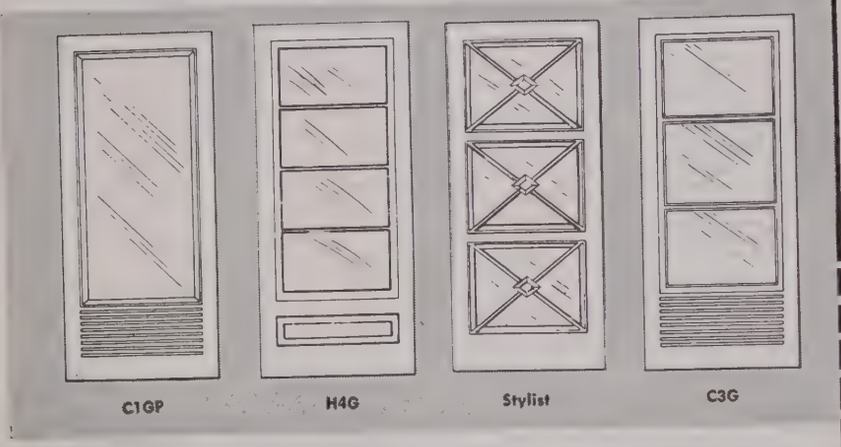
Plants at: Arnold, Pa. • Ellwood City, Pa. • Jeannette, Pa. • Okmulgee, Okla.

AGAIN . . .
Something New Has Been Added!

Continental

Continental Combination Storm and Screen Doors Now feature:

NEW NARROW-LINE STYLING
Finest Insert - Fastener Available!



The *new narrow-line look,* so important in contemporary design, has now been added to all Continental combination door patterns. Wood parts are narrower; glass inserts give more vision and light; screen panels provide more ventilation in warm weather. And, yet, this added beauty of line and functional efficiency have been achieved with no sacrifice of overall strength.

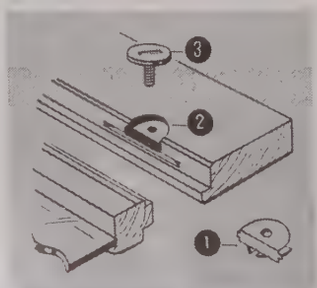
And, Continental's new *Speed Nut Insert-Fastener* has these advantages to offer: simple to operate . . . improved appearance —no metal showing on outside face of door . . . lifetime service . . . completely in open—no hidden parts to engage, no loosening of inserts through vibration . . . foolproof trouble-free operation.

How Fastener Operates

1 Arched prongs — providing spring tension — lock themselves to screw threads.

2 Speed Nut as it appears in door stile.

3 Large head screw clamps insert securely to door frame.



Here is the Full Continental Line

OF QUALITY PRODUCTS

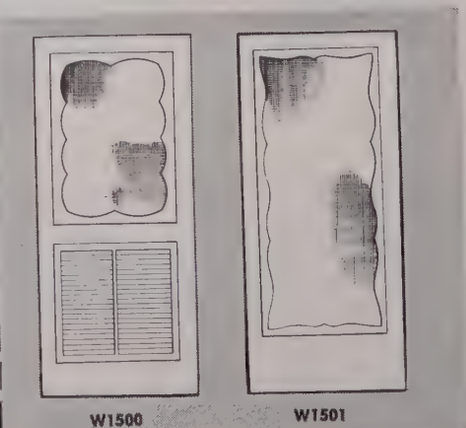
1. Combination Screen and Storm Doors
2. Screen Doors . . . Decorator Screen Doors and Louver Inserts
3. Full Size Window Screens
4. Storm Sash
5. Combination Screen and Storm Sash Units
6. Extension Window Screens

Made of *Ponderosa Pine*

For Warmth, Beauty and Durability

And . . .

DON'T OVERLOOK THESE NEW DECORATOR SCREEN DOORS . . .



For entrances, porches or breezeways, these new Continental Screen Doors give a home added beauty, privacy and protection. They are sure to be tremendously popular with architects, builders and homeowners.

CONTINENTAL SCREEN COMPANY, 310 South Michigan Avenue, Chicago 4, Illinois

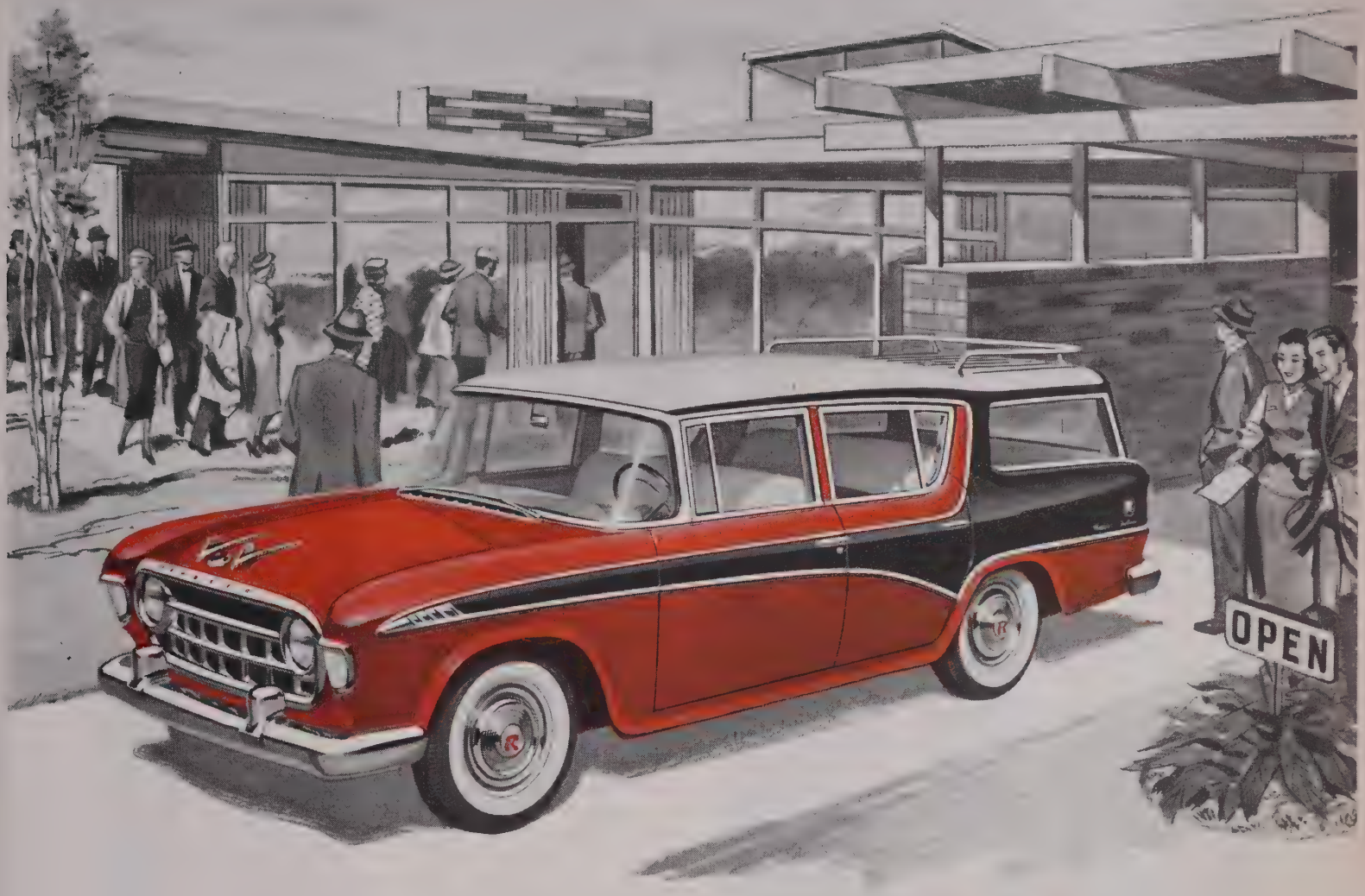
FACTORIES:

The Wabash Screen Door Co
Memphis 2, Tennessee

The Philadelphia Screen Mfg. Co.
Philadelphia 43, Pennsylvania

The Wabash Screen Door Co.
Minneapolis 14, Minnesota

SUGGESTION FOR BUILDERS! *Be sure to include Continental products in your original home plans and specifications. When these essentials to the well-built, complete home are included in original financing, it eases the financial burden of the home buyer. Feature these Continental quality products and make your homes more saleable.*



ADD THE APPEAL OF

Rambler

...America's Favorite Car For Town And Country, TO YOUR HOMES!

Do as other alert builders are doing . . . capitalize on the popularity of Rambler to help you sell new homes. No other car so completely captures the spirit and feeling of contemporary American life. No other car provides so perfect a solution to the "2-Car" need posed by suburban living. Consider the sales advantages that Rambler can bring to *you* as a builder . . .

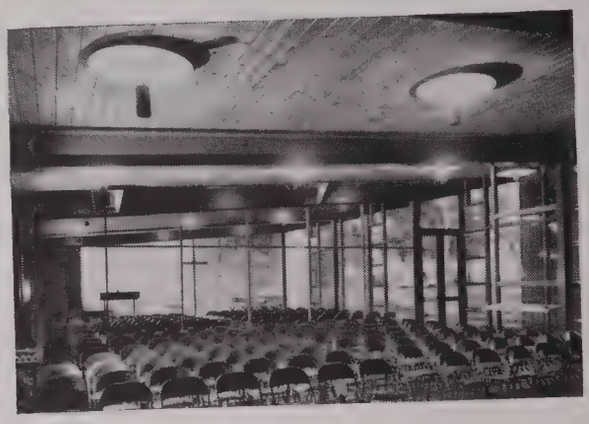
- The perfect answer to Madam Prospect's need and desire for a car of her own when she moves to your house in the suburbs.
- A complete sales package that includes the two major purchases in a person's life—home and car.
- A definite advertising asset that can set your homes apart from all competition.

Ask about our special builders' sales package on the smart new Rambler—Write or Wire FLEET SALES DIVISION

AMERICAN MOTORS CORPORATION • 14250 Plymouth Road, Detroit 32, Michigan

AMERICAN MOTORS MEANS MORE FOR AMERICANS

"Little brown church in the vale" ...*modern version*



Heated radiantly with Steel Pipe

For this widely publicized community church, built for a total of only $67,000, steel pipe radiant panel heating fitted the budget and the heating requirements perfectly.

The simple beauty and dignity of an interior unmarred by exposed heating elements, and the all-purpose flexibility made possible by sliding walls, governed the selection of "invisible" radiant heating. The known economy and durability of steel pipe for heating made *it* first choice.

Yes, steel pipe has been proved in more than 60 years of hot water and steam heating applications. It still is the most widely used pipe in the world for radiant heating, snow melting, plumbing, fire sprinkler systems, structural applications, air, gas and water lines!

Write for the free 48-page color booklet, "Radiant Panel Heating with Steel Pipe."

Committee on
STEEL PIPE RESEARCH
AMERICAN IRON AND STEEL INSTITUTE
350 FIFTH AVENUE, NEW YORK 1, N.Y.

Steel Pipe is First Choice



Here's beautiful news!

New Flintwood "32"!

. . . the only 32″ asbestos siding
. . . in eye-filling two-tone colors . . . with
Wrap-Around Dura-Shield® Silicone Protection!

You've got to *see* it to believe it! For Flintkote's new Flintwood "32" offers you a brand new concept of color-tone, surface protection and proportion in siding!

Let's take the last-named advantage, *first!* A 32″ length! You apply Flintwood siding across two studs which are normally 16″ apart. You can apply it over insulation sheathing in new construction. And have all joints nailed into the studs . . . doing away with special fasteners.

And that's not all! If you use Flintwood "32" in 16″ width (as available in the East), much fewer units of siding are required per square. Only *30*, in fact!

If you use Flintwood "32" in 9⅝″ widths, (as available now in the West and South), you still need only 52 units per square.

What *colors* . . . and two-tone effects! What range! Dark brown* . . . light brown . . . dark green . . . light green . . . white . . . ivory . . . and gray. Sidings to please *everyone!*

And . . . every individual panel of Flintkote Flintwood Asbestos-Cement Siding is completely protected with Flintkote's new "Wrap-Around" Dura-Shield Coating! Front . . . back . . . edges . . . corners . . . yes, *even the nail holes.* And the facing shield of silicone gives added protection against moisture and staining.

So take Flintwood "32" from *here* . . . and use it to make homes more beautiful . . . customers more satisfied . . . and profits more gratifying. Ask your Flintkote Representative to show you Flintwood "32" siding today.

THE FLINTKOTE COMPANY, Building Materials Division
30 Rockefeller Plaza, New York 20, N. Y.

*not available in the East at present

REPLACEMENT OR REFUND OF MONEY
Guaranteed by Good Housekeeping
IF NOT AS ADVERTISED THEREIN

FLINTKOTE

Style and Color Leader since 1901

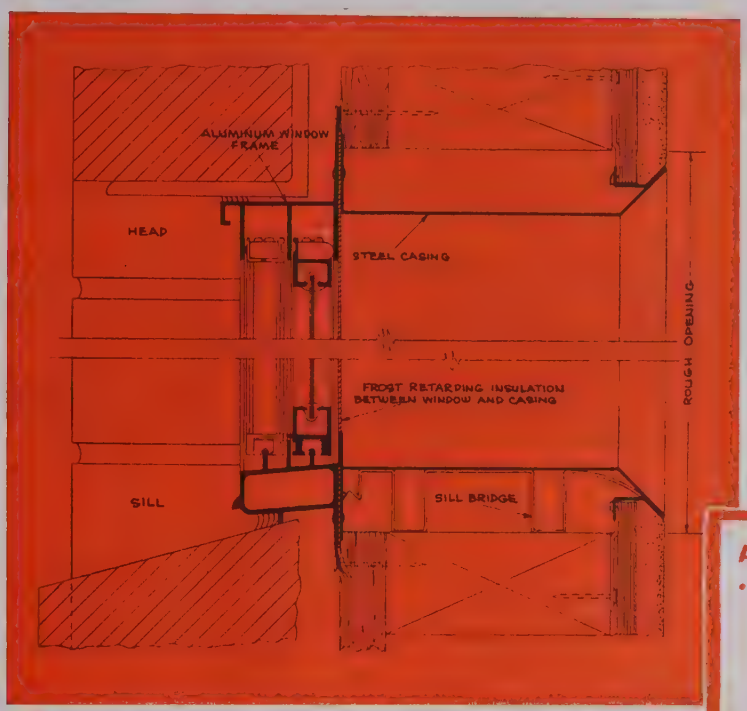


"EVERYTHING HINGES ON HAGER!"*

C. Hager & Sons Hinge Mfg. Co. • 139 Victor Street • St. Louis 4, Mo.
Founded 1849—Every Hager Hinge Swings on 100 Years of Experience

HAGER HINGES *®

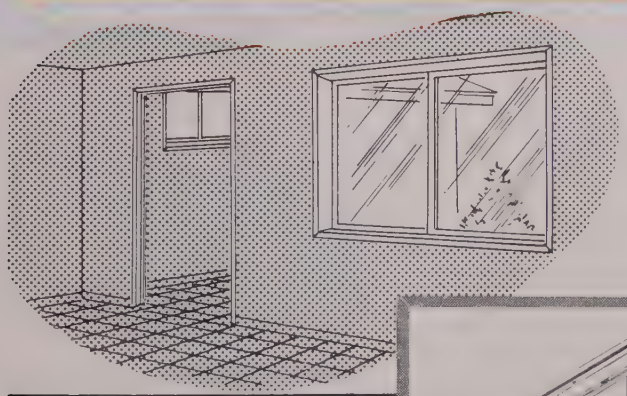
NOW! A COMPLETE "MATCHING" BUILDER'S PACKAGE TO BEAUTIFY AND SPEED WINDOW AND DOOR INSTALLATIONS . . . GIVES YOUR HOMES A MORE EXPENSIVE LOOK, YET COSTS FAR LESS THAN WOOD



IT'S

kewanee's Aluminum

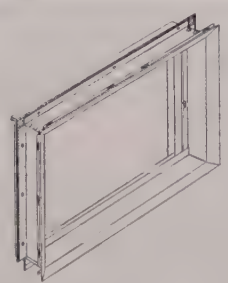
NEW HORIZONTAL SLIDING WINDOWS WITH STEEL WINDOW CASINGS TO MATCH OUR STEEL DOOR FRAMES!



ALUMINUM HORIZONTAL SLIDING WINDOWS . . . WITH EXCLUSIVE FEATURES

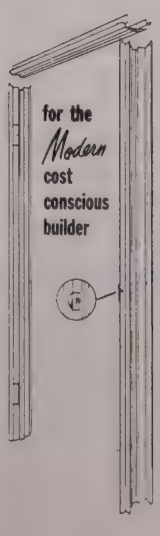


- Generous use of high pile Schlegel cloth insures weather tight fit
- Rigid tubular sill has high rebate—prevents moisture from reaching window stool
- Vents operate smoothly and quietly on Nylasint blocks—no noisy metal-to-metal contact
- Removable vents equipped with self-locking hardware



INSULATED STEEL WINDOW CASINGS

- Keeps plaster away from window
- Install window with casing—complete in 10 minutes.
- Speeds job . . . adds beauty.
- Eliminates plaster returns, plaster grounds and wood stools and trim
- Galvanized and Bonderized for rust prevention and good paint adhesion.

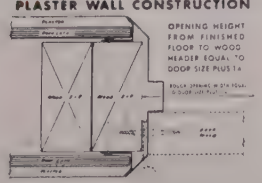


for the *Modern* cost conscious builder

POPULAR TYPE "A" STEEL DOOR FRAME

- Low initial cost
- Quick, easy installation
- Both plaster and dry wall frames
- Rigid attachment prevents vibration
- Handy packaging.

PLASTER WALL CONSTRUCTION



Send for Complete Information . . . WRITE TODAY

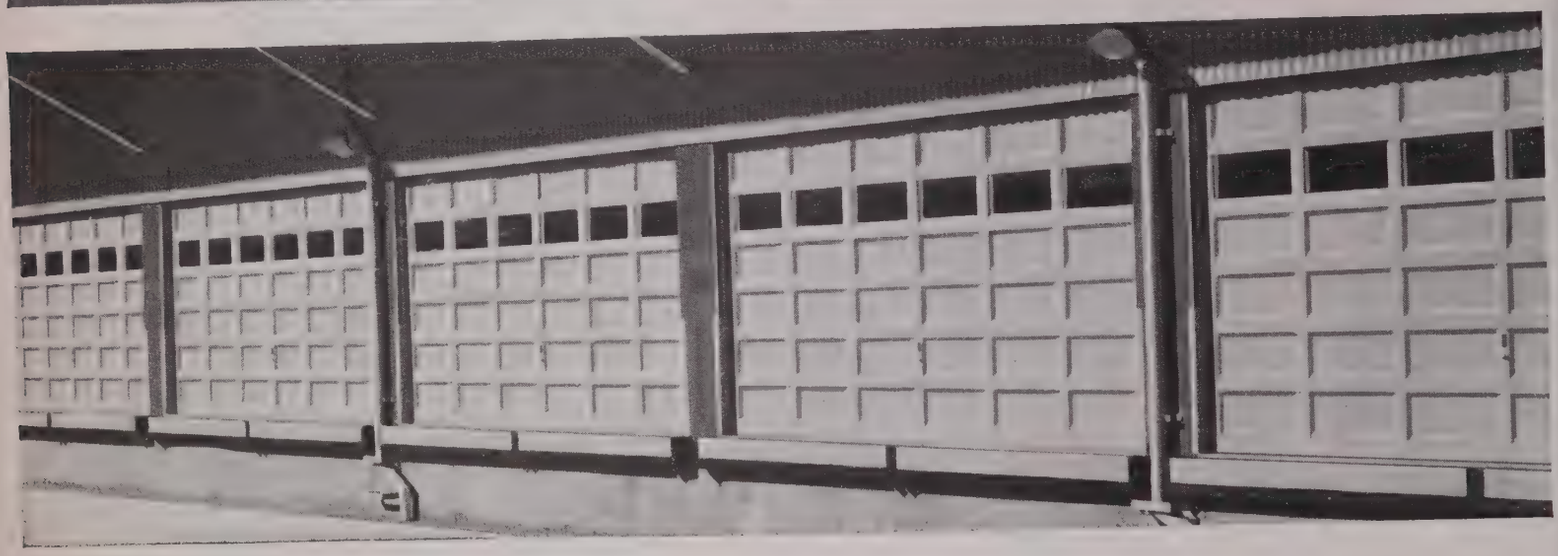


kewanee Manufacturing Company

656 CLARKE STREET • KEWANEE, ILLINOIS







No wonder the Overhead Door Corporation recommends Masonite Dorlux panels!

When you install an "OVERHEAD DOOR" with panels of Masonite Exterior Grade Dorlux, you give the owner a Lifetime Guarantee that these panels won't split, splinter, delaminate or crack.

They're easier to paint, too! The smooth, flat surface of these dense, hardboard panels is a perfect base for surface finishes. And, because they have no grain to rise and disturb your finish, the door stays new-looking longer.

With assurance like this, plus the long-recognized quality of the "OVERHEAD DOOR," your selection of garage doors is made much easier—whether for residential, commercial or industrial applications.

More and more manufacturers use Dorlux®—in panel doors, flush type doors and as door ornaments. Look for the Lifetime Guarantee on the doors you select. Masonite® Corporation, Dept. HH-6, Box 777, Chicago 90, Ill.

EXTERIOR GRADE DORLUX® PANEL

Lifetime Guarantee

The panels of this door are Exterior Grade Dorlux, a product of Masonite Corporation. Dorlux is a wood product selected by the manufacturer of this door to give you the best in quality, beauty, and service. These panels are *guaranteed not to split, splinter, delaminate* or crack due to any natural conditions of weathering. If a Dorlux panel fails in any of these ways, notify Masonite Corporation, giving conditions of failure and name of door manufacturer. After verification of the failure, Masonite Corporation will furnish a new door section or an entire new door, depending on the circumstances, at its expense.

OVERHEAD DOOR CORPORATION
HARTFORD CITY, INDIANA

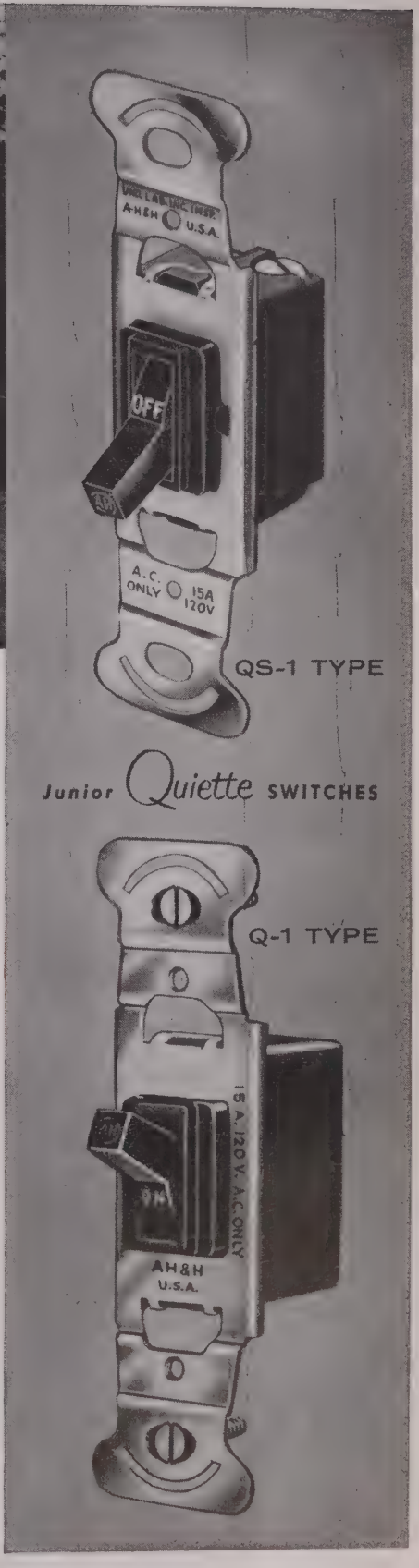
® Masonite Corporation, Chicago, Ill.

Look for this guarantee label on the doors you buy!

IT'LL HELP YOU SELL!

MASONITE
PRESDWOOD PRODUCTS





ARROW AH HART Quiette

LIGHT SWITCHES
Help Sell 4,000 Homes!



"A good investment . . . the Arrow-Hart Quiette Switch is a quality feature that helps sell our homes," says George E. Bell, Bell & Valdez, Bellevue, Washington.

Each of the 4,000 homes — $11,750 to $15,700 — in the Lake Hills development, Bellevue, Washington, will have "silent salesmen" in every room — ARROW-HART Junior QUIETTE SWITCHES.

These smart builders realize that Arrow-Hart Quiette Switches offer prospects *tangible* evidence that these are *quality* homes.

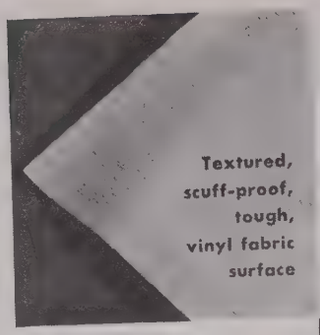
Write for free folder (Form No. A-198) describing the complete Arrow-Hart Quiette Switch line

ARROW AH HART

Wiring Device Division
THE ARROW-HART & HEGEMAN ELECTRIC CO.
103 Hawthorn Street, Hartford 6, Connecticut
Offices, Sales Engineers and Warehouses in Principal Cities

Quality WIRING DEVICES • MOTOR CONTROLS • ENCLOSED SWITCHES • APPLIANCE SWITCHES

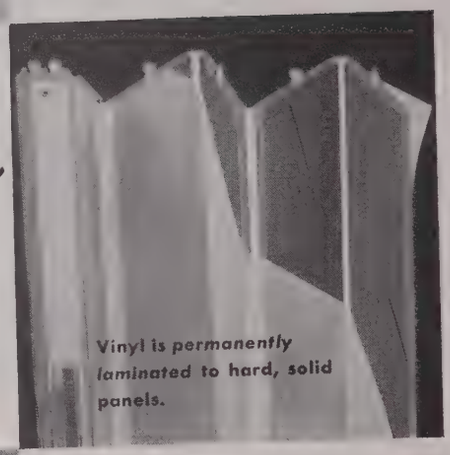
the newest outstanding Grant product development



the Grant folding door

A REAL DOOR THAT FOLDS!

styled by Paul McCobb





features

Solid Panels: The solid panel construction of this Grant door is a revolutionary development in a folding door at moderate price. The *Grant Folding Door* has crisp, clean lines, blocks sound, hangs rigid without billows or rustle. Knock on it. It sounds and feels like a door.

Space Saving: Frees an average of 14 square feet of floor space (19 square feet of wall space) for living space, better arrangement of furnishings.

Durable — Easy to Maintain: Vinyl surface can be wiped with a damp cloth — scrubbed if necessary. Tough and long-wearing, resists scuffing, color is permanent.

Easy Installation: Only a screwdriver is needed to install the *Grant Folding Door* in standard door openings in minutes. Readily adaptable to non-standard openings.

Decorative Flexibility: Color styled to harmonize with modern or traditional furnishings. Attractive design of handles, track and other details, also specially styled by famous Paul McCobb.

▶ Ask for your copy of fully descriptive specifications booklet, the swatch book showing the attractive colors available and texture of the non-scuffing vinyl finish.

the Grant folding door

"A REAL DOOR THAT FOLDS"

Grant Pulley and Hardware Corporation
31-85 Whitestone Pkwy., Flushing 54, N.Y.
944 Long Beach Avenue, Los Angeles 31, Calif.

Other Grant Products:
Sliding Door Hardware • Drawer Slides
Drapery Hardware • Sliding Door Pocket Frames
Sheaves and Tracks • Pulls • Industrial Slides

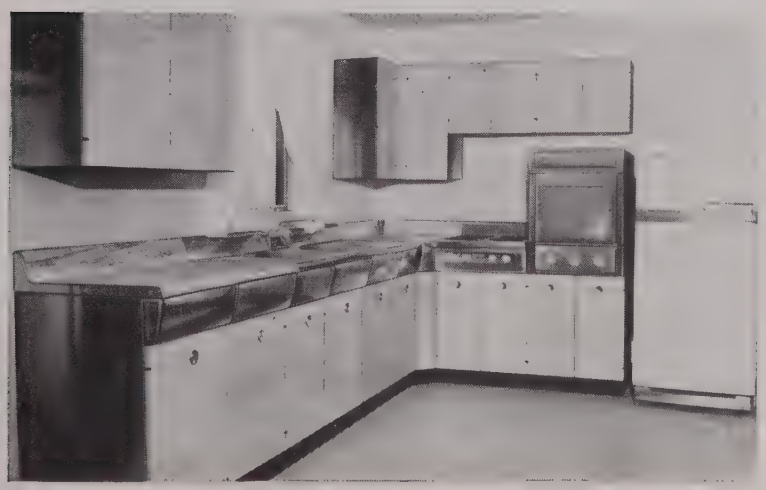
PORTRAIT OF A HAPPY BUILDER



"Prospects are amazed at luxurious 'Pioneer' kitchens of birch, copper and steel in our $9,000 homes"

—Mr. J. M. Mandlebaum,
President, P.A.T. Homes,
Tucson, Arizona

Tucson builder features "Pioneer" kitchens in 298 homes—with spectacular results!



"When a woman walks into the kitchen of our model home, another house is sold," says Mr. Mandlebaum, speaking of the 298 homes his company is building in Craycroft Village, near Tucson. "They've seen kitchens like these in $15,000 to $50,000 homes, and are delighted to find them in our homes, which are under $9,000."

The "Pioneer" by American Kitchens is stunning and modern—a dramatic combination of natural birch and antique copper on a steel frame. It's easy to install and truly versatile—perfect for everything from a simple kitchen center to a complete kitchen with matching appliances.

Most important, the "Pioneer" is a sale-clinching feature that adds comparatively little to your costs. No matter what the price bracket, home buyers immediately recognize the "Pioneer" as the finest in quality and styling. If you haven't already discovered the selling advantages of the "Pioneer" and other American Kitchens products, mail the coupon below—today!

American Kitchens

DIVISION AVCO CONNERSVILLE, INDIANA

SELL YOUR HOMES FASTER!



American Kitchens, Dept. HH-56-6
Connersville, Indiana

☐ I'd like to have "no obligation" quotation on my next kitchens.

☐ Please send your new Architects' and Builders' File.

Name _____

Address _____

City _____ Zone _____ State _____

The Most Appealing Comfort Feature



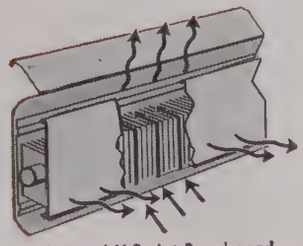


Bathroom—Even temperature with minimum floor space.

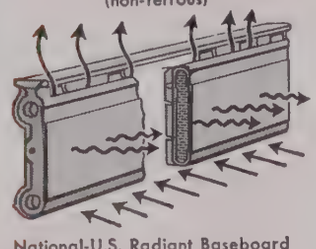




Bedrooms—Comfort control with the temperature of your choice.



National-U.S. Art Baseboard
(non-ferrous)



National-U.S. Radiant Baseboard
(cast iron)

Home buyers today are becoming increasingly aware of the comfort advantages afforded by modern hot water heating systems. It is a most important consideration in their acceptance of a new home. National-U.S. Baseboard Heating Systems bring *real comfort* to the entire home . . . make each room delightfully livable . . . provide a uniform, even blanket of warmth from floor to ceiling.

National-U.S. Baseboard Heating Systems are easy to install and, for this better system, add only a small percentage to the total cost of the home.

You can also offer your prospects year 'round domestic hot water, snow-melting, temperature zoning and cooling. Use these convincing comfort features to promote quick acceptance and more profitable business for you.

in the homes you are planning . . .

and your most impressive sales feature . . .

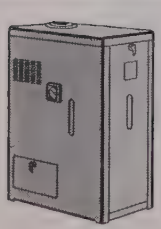
National-U.S. Baseboard Hot Water Heating Systems



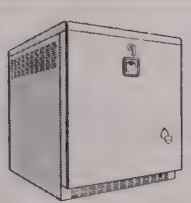
Dining Room—Uniform temperature at sitting level.



Living Room—Solves the difficult picture window problem. Place your furniture where you please.

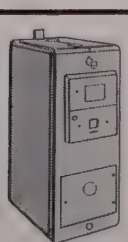


National-U.S. Gas Boilers

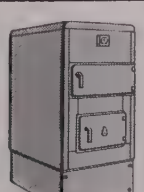


National-U.S. Packet All-in-one, Automatic Home Heating Unit For gas or oil firing





National-U.S. Cast Iron Boilers for Automatic Firing



National-U.S. Residential Steel Boilers Sizes to meet all needs

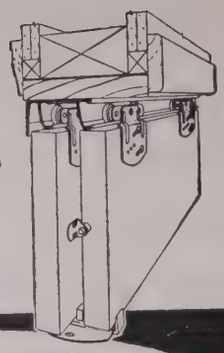
National-U.S. Hot Water and Steam Home Heating Boilers perform with full efficiency when used with National-U.S. Baseboard. There is a style and size for every residential requirement—large, medium or small.

Write for bulletins on National-U.S. Boilers and Heat Distributing Units

National-U.S. Radiator
CORPORATION
HEATING AND AIR CONDITIONING DIVISION
Johnstown, Pennsylvania

Sterling®

QUICKER, EASIER
and all ways better
FOR ALL SLIDING DOORS



600 SERIES

FIRST and only packaged sets with all these better features

- Aluminum track with built-in fascia . . . etched and anodized. Fits standard head jamb. 1⅛" headroom. Doors can be hung after hangers are attached.
- Twin nylon wheels with *oiled-for-life* bronze bearings.
- Steel hangers with angle-slotted screw holes for easier plumbing of doors.
- Door stop limits sliding action of doors to prevent pinching fingers.
- Nylon and steel door guide installed easily with just two screws.

700 SERIES

Similar to 600 Series except track does not have built-in fascia or anodized finish

- Aluminum track . . . fits standard head jamb. 1½" headroom. Doors can be hung after hangers are attached.
- Twin or single 1" nylon wheels with *oiled-for-life* bronze bearings.
- Steel hangers with angle-slotted screw holes for easier plumbing of doors.
- Door stop limits sliding action of doors to prevent pinching fingers.
- Nylon and steel door guide installed easily with just two screws.

THRIFTEE PAK®

NEW! "THRIFTEE PAK" SET

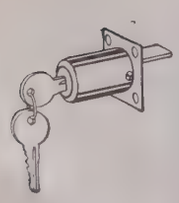
FIRST and only set for BOTH 3/4" or 1-3/8" doors with all these features

- Aluminum track, 1⅜" headroom. Doors can be hung with hangers attached.
- Big 1" nylon wheels. One piece, husky steel hangers with slotted screw hole for easier plumbing of doors.
- Nylon and steel door guide uses two screws.

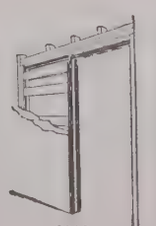
low as $5.50 list

CONSTANT IMPROVEMENTS KEEP STERLING AHEAD OF COMPETITION — HERE ARE OTHER

FIRSTS FROM STERLING—



1058
Sliding Door Lock



1200
Pocket Door T-Frame



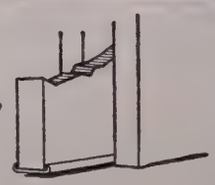
883
Pocket Door Pull



863 - 865 - 867
Surface Mounted Door Pulls



885
Door Cushion



878
Guide Strip

WRITE FOR OUR 24 PAGE CATALOG

See our Catalog in Sweets' Architectural or Light Construction Files

John Sterling Corporation

Formerly Sterling Hardware Mfg. Co.

2345 West Nelson Street, Chicago 18, Illinois

© 1958 JOHN STERLING CORPORATION, CHICAGO



Built-in SALESMEN for YOU!

It takes a touch of sales glamour to move even the nicest-looking, best-built house. And Hardwick built-ins are the sale-closing frosting on the cake. High-style Hardwick gas oven and surface units offer the homemaker more in styling, performance and durability, yet cost you less. Install Hardwick Built-In Gas Cooking Units — let them sell for you.

HARDWICK GAS RANGES

Since 1879

High-Style Beauty . . .
Laid out by America's top designers. Finished in Stainless, Coppertone or White Porcelain.

Quick, Easy Installation . . .
All connections made in front

Popular Price . . .
America's greatest built-in value

Luxury Features . . .
Many are standard. Optional: Oven Window and Light, Clock-controlled Oven, Thermal Eye Burners.

Hardwick Stove Company • Cleveland, Tennessee

Please send me full information on Hardwick Built-In Gas Ranges.

Name_____

Address_____

City_____ Zone_____ State_____

Hardwick Advertisements appear in full color in

Ladies' Home Journal
McCall's
Better Homes & Gardens
House Beautiful

Strongest way to

bring on the buyers...



Sell with a brand name they know and want!

IN today's competitive building market, you want all the sales sock you can muster. The kind of pull-power you get with Mueller Climatrol all year air conditioning!

Think about it. You offer the appeal of luxury along with the down-to-earth pleasure promise of full-time comfort conditioning. And you do it with Mueller Climatrol — a reputation for quality that doubles the impact.

Want a more complete look at the rosy sales possibilities? Write direct, or...

See the man from

Mueller Climatrol

Dept. 66, 2020 W. Oklahoma Ave., Milwaukee 15, Wisconsin



SALES-WINNERS — Combination Unit (Type 128-928 at left) can be installed complete for all-year air conditioning, or with heating and provision for low-cost addition of cooling. Lets you offer the cooling feature, even though your budget prevents complete installation. Same benefit applies to coil units (above), designed for use with remote air- or waterless-condensing units and highboy or lowboy furnaces. They're part of America's most complete line of heating and cooling equipment.

The Real Mark of Quality...

A Follansbee Terne Roof!



...and a Terne Roof Will Sell Your Homes!

Your buyers normally may not ask about the roof . . . but with Terne, the roof becomes a feature you can sell! For after all, a house is a shelter and the roof provides the shelter. And a Terne roof offers the selling qualities that mean so much to prospective buyers—it will last as long as the house stands, it is fireproof, weathertight, windproof and can be painted any color, anytime, to harmonize with the house exterior and the surroundings. Above all, Terne makes the best roof for air-conditioned homes. So try the roof that will help you sell your homes... a Follansbee Terne Roof!

REFLECTIVITY

Painted white or a light color, Terne will reflect more of the sun's heat than any other roof.

LONG LIFE

Many installations of Terne have been in service for more than 100 years.

EXTRA BEAUTY

Terne can be installed in either standing, batten or horizontal seams—each a distinctive design of beauty.

SAFETY

Terne is fireproof, windproof and, when properly grounded, will protect your houses against lightning.

Roofing and sheet metal contractors everywhere will install Follansbee Terne Roofs. See them or write.

FOLLANSBEE

STEEL CORPORATION

FOLLANSBEE, WEST VIRGINIA

Cold Rolled Strip • Terne Roll Roofing • Polished Blue Sheets and Coils

Sales Offices in Principal Cities



don't leave holes in your insulation

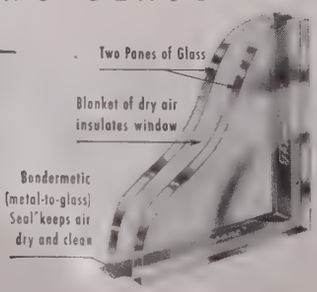
You insulate your walls for more comfort and for dollars-and-cents reasons. So why leave holes in them—uninsulated windows? With *Thermopane** insulating glass in every window, your weather conditioning is complete. *Thermopane* gives you:

Warmer rooms in winter . .	just like your other insulation does
Cooler rooms in summer . .	" " " " " "
Savings in heat bills	" " " " " "
Quieter rooms	" " " " " "
And no seasonal work—it's permanent window insulation stays in all year	" " " " " "

Delivery of *Thermopane* has been accelerated by expanded glass-making facilities. Standard sizes are stocked by L·O·F Distributors and Dealers (listed under "Glass" in phone book yellow pages), and consequently are more readily available than special sizes made to order. For our booklet, "Self-Insulating Windows of *Thermopane*," write Dept. 966, Libbey·Owens·Ford Glass Company, 608 Madison Avenue, Toledo 3, Ohio. *®

Thermopane
INSULATING GLASS

L·O·F GLASS®



LIBBEY · OWENS · FORD *a Great Name in Glass*

or your sales appeal!

One Chicago builder offers Thermopane for only $1.17 per month!

With single glazing his house cost $24,674.00

Thermopane in every window added 276.00 (and a whole lot of sales appeal)

For the additional comfort and prestige of Thermopane the customer paid 83.00 MORG OOWN

And added to his mortgage 1.17 MORG PER MONTH

(For less than the cost of good storm sash and none of the nuisance).

P.S. call your L.O.F Distributor for the whole story

This ad ran in the POST, April 28. you'll see more in 5 or 6 other national magazines.

The "plus" home buyers want...

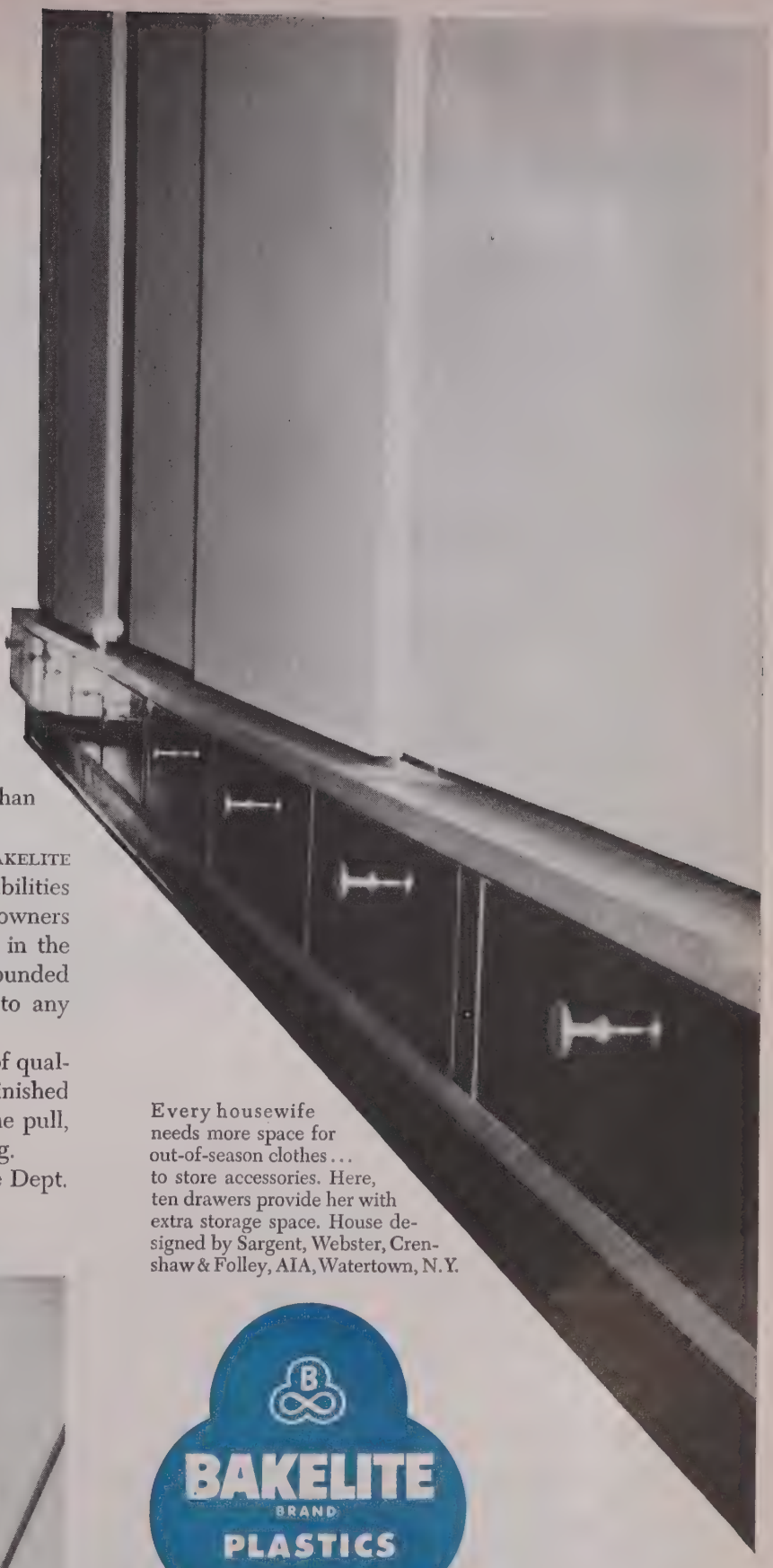
More built-in storage space

Here's an important new way of putting more sales appeal into your houses . . . to satisfy the demand for more storage space . . . at a cost lower than you ever thought possible!

Ready-made, one-piece drawers molded of BAKELITE Brand Phenolic Plastic offer new storage unit possibilities for every room in your houses. Prospective home owners are quick to see the advantages. They'll delight in the ease of cleaning (they're glossy smooth . . . have rounded corners) and the smart black finish that fits into any decorative plan.

Costs are comparable to conventional drawers of quality construction. The drawers come completely finished with guides molded in . . . just drill a hole for the pull, slide into place! No fitting, no sanding, no painting.

See your building supply dealer today, or write Dept. PZ-78, for full information and list of suppliers.



Every housewife needs more space for out-of-season clothes . . . to store accessories. Here, ten drawers provide her with extra storage space. House designed by Sargent, Webster, Crenshaw & Folley, AIA, Watertown, N.Y.



Rugged molded phenolic drawers provide ideal storage space for the children's toys in his bedroom. Located where they're easy to use, too! Drawers manufactured by **Boonton Molding Company**, Boonton, N. J.

BAKELITE COMPANY
A Division of Union Carbide and Carbon Corporation
UCC
30 East 42nd Street, New York 17, N. Y.

The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC

BAKELITE BRAND PLASTICS

BAKELITE COMPANY Dept. PZ-78
A Division of Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, N. Y.

Please send me information on variety of sizes of drawers molded of BAKELITE Brand Phenolic Plastics and names of manufacturers who can supply them.

NAME_____ TITLE_____

COMPANY_____

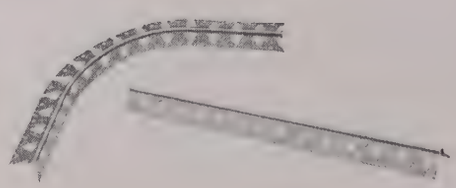
ADDRESS_____

CITY_____ ZONE_____ STATE_____

Put the permanent strength of steel into your homes...*with Gold Bond's NEW Corner Bead*



Guard against costly damage to wallboard construction by protecting exterior corners with steel. This new corner bead, styled after the already popular Gold Bond plaster corner bead, gives wallboard corners a firm, lasting reinforcement. The exclusive triangular design affords maximum bonding of joint cement. Deep knurled flanges prevent joint cement slippage during application and provide better adhesion after application.



Use Gold Bond Wallboard Corner Bead for straight corners or simply snip flanges to form a versatile arch bead.

Protect Door and Window Edges with Gold Bond Wallboard Casing Bead

These *steel* casings make terminating wallboard construction around windows and doors easier and more economical. Low-cost Gold Bond Casings are self-finishing and eliminate the need for wood trim. Each casing unit fits snugly and has a ridge design that locks in the wallboard.



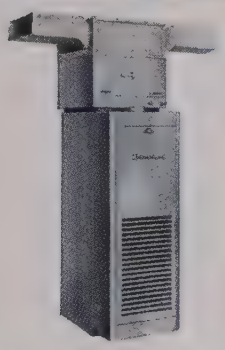
Use Gold Bond Wallboard Casing Bead with its self-locking ridge design and mitered edges for a snug fit.

Strong exterior corners and door and window edges are important sales features that homeowner prospects are looking for in home construction. Give *your* homes the added strength of Gold Bond Corner and Casing Bead. Ask for complete facts today. Write National Gypsum Company, Buffalo 2, New York.

Gold Bond®
BUILDING PRODUCTS
NATIONAL GYPSUM COMPANY

4 newly designed, lower cost yearound airconditioning systems

help builders close more sales



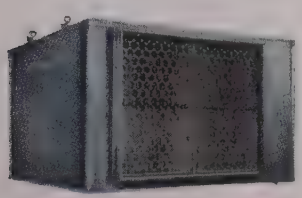
Hi-Boy Heating
with Plenum Type Cooling



Lo-Boy Heating
with Duct Evaporator Cooling



Counterflow Heating and Cooling



Suspended Horizontal Cooling

Builders can now choose from four compact WILLIAMSON Wethermatic Yearound Airconditioning systems . . . the cooling equipment requires *no floor space*. Williamson Wethermatics are low cost, quickly installed and premerchandised with an all-round national consumer promotion in major shelter magazines.

WILLIAMSON

"WETHERMATIC" SYSTEMS CONSIST OF:

The "SPECIAL" Line—A Builders Type Warm Air Furnace

New lower prices reflecting mass production savings

- 20 gas-fired, 12 oil-fired models
- 60,000 to 145,000 B.T.U. Range
- Hi-Boy, Lo-Boy, Counterflow, Gravity and Horizontal Units
- Pre-Wired, pre-Assembled, factory test-fired.

New color choice . . . Gray Metalescent or Gleaming White

AIRefrigeration Waterless Cooling—

- No floor space installations
- No costly sewer or water connections
- Internally factory wired, easily installed.
- 2, 3, 4, 5 or 7½ ton size models
- Console and suspended models where desired.

Prefabricated Duct Pipe & Fittings—For Heating and Cooling

- Die Cut, prefabricated, each fitting interchangeable with others
- Fittings shipped packed per house plan
- Tailor-made look, designed to fit within the joists
- Designed for minimum air resistance—maximum air flow efficiency.

See our 12-page catalog insert in SWEET'S 1956 Light Construction Files.

Visit Booth No. 839 NAHB Convention

THE WILLIAMSON COMPANY
3334-A-6 Madison Rd., Cincinnati 9, Ohio

Please send me information on:

☐ Yearound Airconditioning ☐ Cooling Equipment
☐ Heating Equipment ☐ Duct, Pipe and Fittings

Name_____

Firm_____

Address_____

City_____ Zone_____ State_____



IN EVERY ARCHITECT'S OFFICE...

KENROYAL VINYL TILE SAMPLES

You'll want to be sure you have this sample box on hand for quick, easy reference to the full range of high taste colors available in the finest of vinyl tiles. KenRoyal, a luxurious homogeneous vinyl by Kentile, Inc., offers qualities demanded by your most discriminating clients . . . it is greaseproof, easy to maintain. Colors include the much wanted plain black and plain white as well as 6 matching colors in 1-inch wide Feature Strip for unlimited design scope. Available in Standard tile size: 9"x9". Thickness: Standard (.080") and ⅛". If you have not yet received a set of these 3"x3" Architect's Specification samples, please write on your letterhead to Kentile, Inc., 58 2nd Ave., Brooklyn 15, N. Y. We will be glad to rush them to you.

KENTILE, INC. America's largest manufacturer of resilient tile flooring

KENTILE Asphalt Tile, Carnival Kentile, Corktone Kentile • KENCORK, Cork tile for Floors and Walls • KENRUBBER, Rubber Tile • KENFLEX, Vinyl Asbestos Tile, Carnival Kenflex, Corktone Kenflex • KENFLOR Vinyl Tile, also available by-the-yard • KENROYAL Vinyl Tile • SPECIAL KENTILE, Greaseproof Asphalt Tile • THEMETILE, KENSERTS, Decorative Inserts • KENCOVE, vinyl wall base • KENBASE, wall base.



NEW FIAT PreCast SHOWER FLOOR

LOWERS COST OF SHOWER CONSTRUCTION

Monterey model available in six sizes—rectangular, square and corner designs.

The new FIAT *Monterey* shower floor has a PreCast integral threshold and curb that completely eliminates the most expensive steps in shower construction: the built-on-the-job floor, threshold and pilasters. Glass filler panels at the jambs replace the pilasters, rest directly upon the curb of the *Monterey*. The FIAT PreCast Shower Floor simply slides into place—there's no need for sub-pan, mortar, tiling and hours of costly labor. Try this new shower technique that saves you money and produces added sales appeal.

The *Monterey* shower floor, *PreCast* of sparkling terrazzo, is permanently leakproof and furnished as a complete unit with solid brass drain and stainless steel strainer plate. There is nothing else to buy —nothing else to install! The photograph shows an excellent and economical shower combining the *Monterey* floor with a glass filler panel and door forming the front. Either hinged or sliding doors, by others, may be used as the solid threshold provides a convenient foundation for the track.

It's so much easier to see the advantages of PreCast Floors than to read about them. That's why we would like just five minutes of your time to show you this cross section sample. Clip coupon to your letterhead and get full information. No obligation of course.



FIAT METAL MANUFACTURING CO.
9317 Belmont Avenue, Franklin Park, Ill.

Please send complete information on your complete line of shower equipment.

Name_____

Company_____

Address_____

City_____ State_____

Type of Business_____

FIAT

FIAT METAL MANUFACTURING CO.

Since 1922...First in Showers / *Packaged Showers • Doors • Floors / Toilet Room Partitions*

FOUR COMPLETE PLANTS: Long Island City 1, N. Y.; Franklin Park, Ill.; Los Angeles 63, Calif.; Orillia, Ontario, Canada

The "Key to Better Living"



1144 sq. ft. of living space

This one floor plan is available in 6 exciting exteriors featuring optional fireplace and front porch

. . . opens new profit possibilities for builders of

Inland homes

Inland Homes are of conventional type construction and appearance. There are 12 basic floor plans and 72 exterior designs.

- The Inland package offers more than you'll find in any other pre-fab package.
- An Inland Home can be erected in less time and at lower cost. You can offer a higher quality home than your competition.
- Floor plans which give a new dimension to living—beautiful exteriors and unusual roof designs—make Inland Homes easier to finance. Their quality is readily apparent to both buyer and mortgage men.

We have a story that tells you how easy it is to get started—it's one you can't afford to overlook. We suggest you visit us and see for yourself why an Inland Home dealership is the most valuable one you could have. Write us on your letterhead for appointment — or better still, 'phone 3880, Piqua, Ohio.



Inland Homes Corporation

501 SO. COLLEGE ST. PIQUA, OHIO PHONE 3880 P.O. BOX 915

KEY TO BETTER LIVING · Inland · design-precision-quality



NEW! International® 300 Utility Tractor now with POWER STEERING



Up to 1,000 pounds greater built-in weight gives the new International 300 Utility *stamina* to cut downtime, *traction* to step up output.

Steer single-handed, maneuver in cramped quarters . . . keep the other hand free to control equipment! The new International 300 Utility with power steering gives the operator finger-ease control of the wheel—even with heaped half-yard bucket on a heavy-duty loader. One-hand steering lets him load, doze, backfill, grade and level *on the go*. With the 300 Utility built-in strength and stamina, users report they move up to *25 per cent more dirt* in a day than with lighter-weight, harder-to-handle outfits.

IH power steering blocks kickbacks from the front wheels to lessen operator fatigue—yet retains the "feel of the wheel" and normal self-return. It is powered from the tractor's regular Hydra-Touch hydraulic system, eliminating the cost of a separate pump.

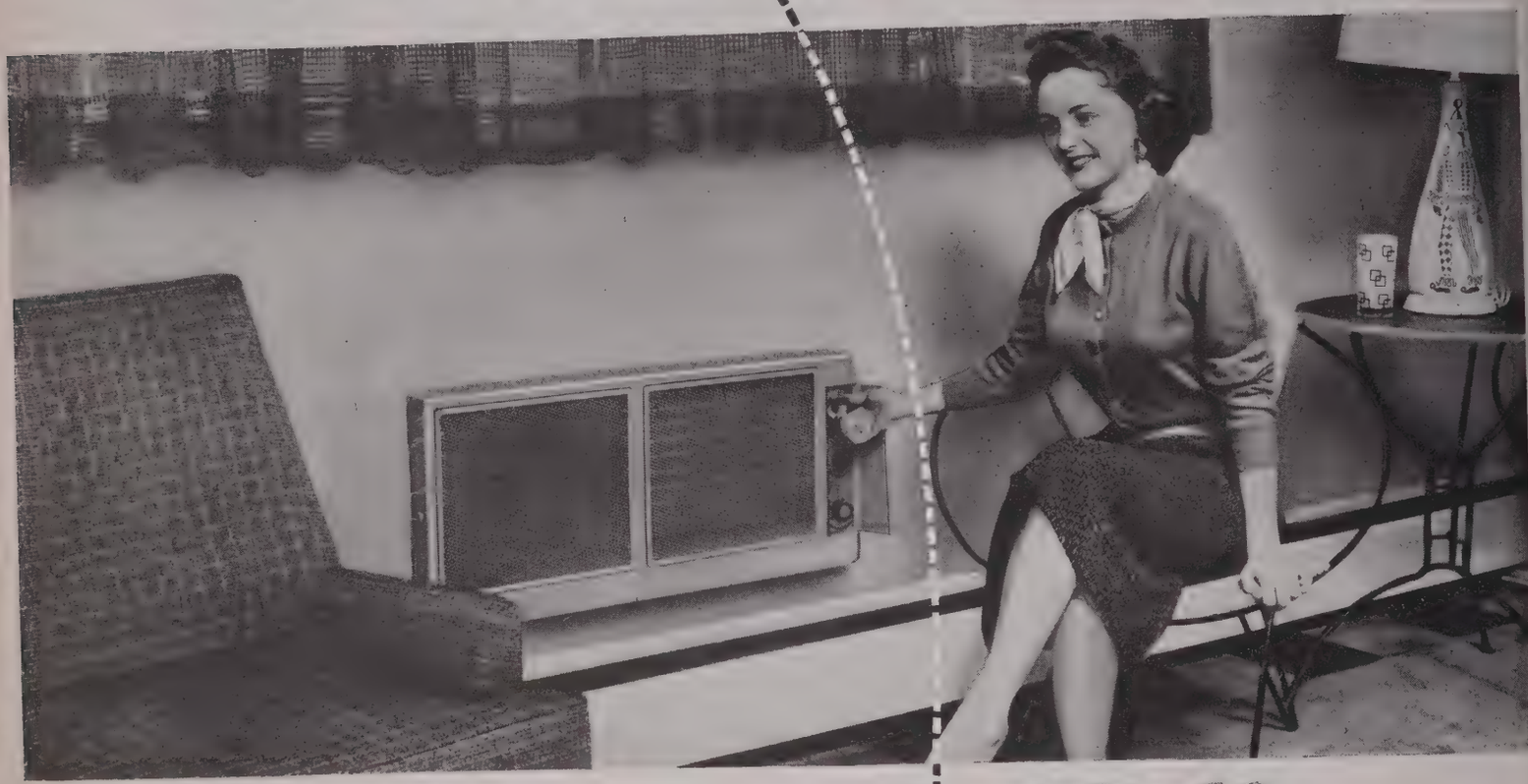
Your IH Dealer will demonstrate! Look in the classified directory . . . phone today for an on-the-job test. More than 50 items of special duty equipment let you match IH utility tractor power to your job. For free specification folders, write International Harvester Company, Dept. HH-4, P. O. Box 7333, Chicago 80, Ill.

See your

INTERNATIONAL HARVESTER DEALER

International Harvester products pay for themselves in use—McCormick Farm Equipment and Farmall Tractors . . . Motor Trucks . . . Crawler and Utility Tractors and Power Units—General Office, Chicago 1, Illinois

Here it is! LOW COST ANSWER TO AIR CONDITIONING!



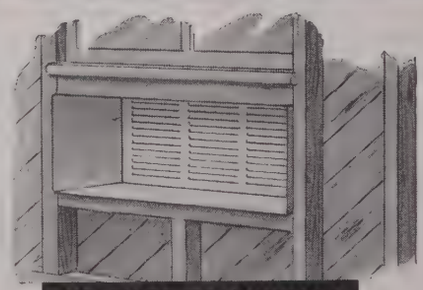
NEW LEWYT *BUILT-IN* WALL AIR CONDITIONERS SOLVE COST PROBLEMS FOR ALL BUILDERS!

Now, for the first time, you can install air conditioning in houses priced as low as $8,000 without substantially increasing the cost of the house.

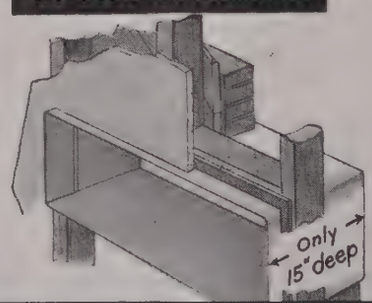
Only 15" deep, the compact Lewyt Built-In Wall Air Conditioner fits *flush*—inside and out—in any outside wall. And, with Lewyt's new scientific perimeter cooling method you can air condition any part of a house or all of it.

The Lewyt has individual controls and thermostat built right in. There are no ducts to install—no obstructions of any kind in your windows.

Imagine—all of this, plus, Lewyt quality at a price every builder can afford. Get all the facts—today!



NO DUCTS OR PLUMBING!



REALLY FITS FLUSH INSIDE AND OUT!

LEWYT

BUILT-IN WALL AIR CONDITIONER

By the maker of the famous Lewyt Vacuum Cleaner

LEWYT AIR CONDITIONER CORPORATION, Dept. HH-6
57th St. and 1st Ave., Brooklyn 20, N. Y.

Please send me figures and complete details on the new LEWYT BUILT-IN WALL AIR CONDITIONER

Name_____

Company_____

Address_____

City_____ County_____ Zone____ State_____

Announcing the Revolutionary New

WASTE KING

Automatic

DISHWASHER

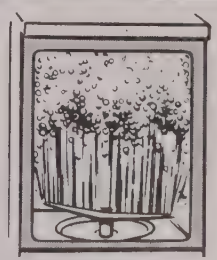


FS-1C

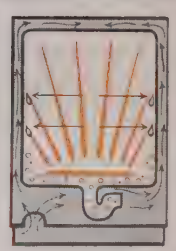
...a VISIBLE FEATURE that adds selling power to your homes

Developed by Waste King engineers in the tradition of Waste King quality ...with every feature housewives need to do a better, more complete dishwashing job.

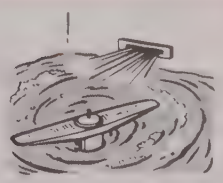
Washing action more efficient — revolutionary rinsing and drying — easier loading — service-free design — years ahead styling. Waste King obsoletes all other methods of dishwashing.



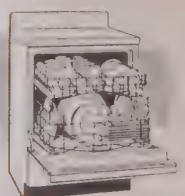
BETTER WASHING
70 swirling jets drench all dishes, glasses, pots with a powerful needle spray.



HUMIDITY-FREE DRYING
No steam expelled into the kitchen. No dust-laden air enters the sealed tub.



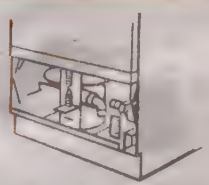
SUDS FLUSH-OUT
A powerful spray cleans out all wash water before first rinse water enters.



LARGEST CAPACITY
Versatile, easy-to-load Contour Racks plus large silverware basket.



QUIETER OPERATION
Super "Hush-Cushions" plus Fiberglas insulation guard all noise producing points.



EASY INSTALLATION
Water, drain, electrical connections made from front after dishwasher is placed.

PLUS THESE QUALITY FEATURES

Built-In Drain Pump-Out • Lifetime Porcelain Interior • Push-Pull Cycle Control Knob for fully automatic or manual operation • Interchangeable Door Panels in White Enamel, Stainless Steel, Copper. Also adaptable for wood panels to match any kitchen decor. Two Custom Models: FS-1C (free standing) and UC-1C (under counter).

Waste King



GARBAGE DISPOSERS | AUTOMATIC DISHWASHERS | BUILT-IN ELECTRIC RANGES | BUILT-IN GAS RANGES | INCINERATORS GAS, ELEC., L.P.

FOR LITERATURE AND SPECIFICATIONS, CONTACT WASTE KING CORPORATION

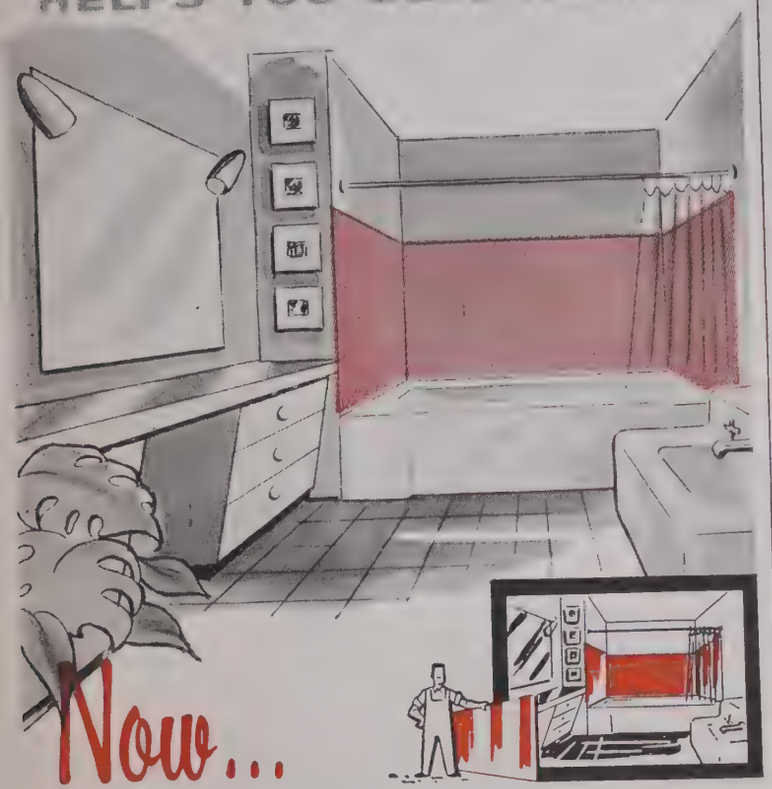
FACTORY: 3301 FRUITLAND AVE., LOS ANGELES 58, CALIF. REGIONAL SALES OFFICES

INSTALL ONLY 1 NOT 230 PIECES

new colorful

CLAD-REX MARVIBOND®

HELPS YOU SELL HOMES



Now...

COMPLETE BATHTUB RECESS with only one 4' x 10' wall panel

Only CLAD-REX Marvibond offers you all these advantages...

- faster, easier, one-piece installation (not 230 small pieces)
- no seams...no joints...waterproof
- highly resistant to impact, abrasion, discoloration
- easily bent, crimped, drilled or punched (on the job with minimum tools)
- 18 beautiful life-long colors
- costs less

FOR ALL THE FACTS...on amazing, new CLAD-REX Marvibond...the vinyl-on-metal wall paneling that perfectly combines the strength of metal (steel or aluminum) with the bright colors, texture and toughness of vinyl...mail the attached coupon.

EXCEEDS VA AND FHA SPECIFICATIONS

Clad REX steel [illegible]

®Registered by Naugatuck Chemical Co., a Division of [illegible]

Mail this coupon NOW for FREE samples, full information and full color brochure.

CLAD-REX steel company

40TH & ULSTER • DENVER 7, COLORADO

Gentlemen: Please rush me FREE samples and complete information on your new Clad-Rex Marvibond.

NAME.....

FIRM.....POSITION.....

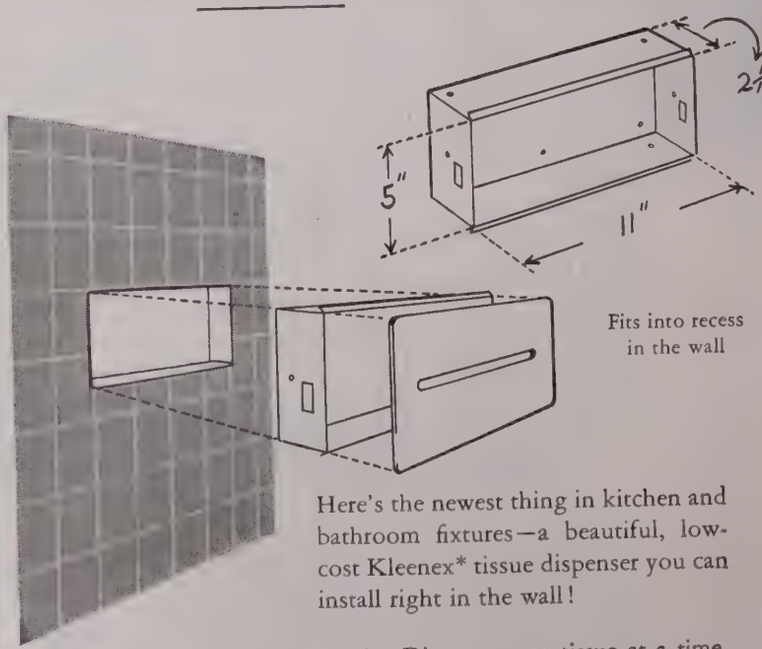
ADDRESS.....

CITY.....STATE.....

Now! A "built-in" Kleenex dispenser for the home—only $1.25!



New *Recessed* Kleenex Cabinet



Fits into recess in the wall

Here's the newest thing in kitchen and bathroom fixtures—a beautiful, low-cost Kleenex* tissue dispenser you can install right in the wall!

Holds full box of Kleenex 200's. Dispenses one tissue at a time. Mirror-chrome finish. Holes in back make it easy to fasten cabinet to studding. Price to builders only $1.25. (Slightly higher in Canada.)

MAIL THIS COUPON NOW!

KIMBERLY-CLARK CORPORATION
CELLUCOTTON DIVISION, DEPT. HH-66
919 N. MICHIGAN AVE., CHICAGO 11, ILLINOIS

Please send me complete information about the new recessed Kleenex cabinet.

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

*T. M. REG. U. S. PAT. OFF.

The ceiling that whispers...of quiet beauty



Home Sales
made easier with

Simpson Forestone®

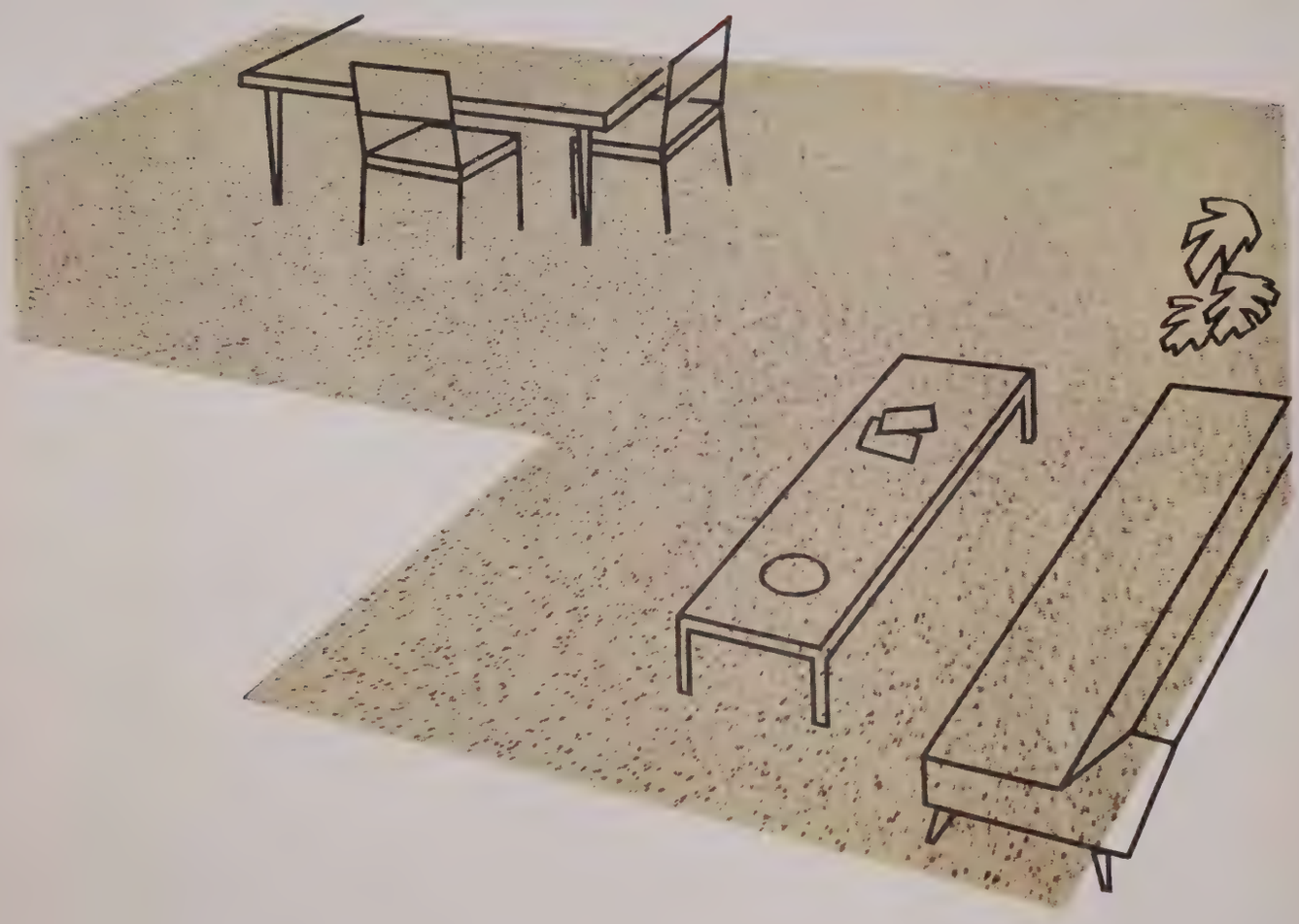
You get a big PLUS for your homes when you install Simpson Forestone. Forestone enables you to offer beautiful harmonizing texture and efficient sound control...rich and satisfying as deep carpeti
And Forestone's low price makes it a *practical* competitive tool for YOU.

VCCO 62

FOR ADDITIONAL INFORMATION AND NEAREST SOURCE WRITE TO SIMPSON LOGGING CO., 1008 WHITE BUILDING, SEATTLE 1, WASHINGTON

Harmony in Living-Dining Areas

Begins with an AZPHLEX® Floor



An Azphlex floor in the living-dining area of the modern home pulls the overall decorative scheme into smooth harmony. Azphlex colors are as new and modern as today's furnishings and fabrics.

This is an extra tough floor, too, because Azphlex is *vinylized*, giving it special qualities to combat the abuses of food serving areas. Highly grease resistant, its extra smooth surface minimizes cleaning chores. Its cost is just slightly more than asphalt tile but considerably less than many floorings of similar appearance and quality. Write today for color chart and information on Azphlex.

Pattern shown: Nougat

AZROCK FLOORING PRODUCTS

AZROCK PRODUCTS DIVISION • UVALDE ROCK ASPHALT CO.

593 Frost Bank Building • San Antonio, Texas • *Makers of* Vina-Lux • Azrock • Duraco • Azphlex

Lennox and only Lennox sells *for* you, not just *to* you

Exclusive ON THE NATIONAL LEVEL

Powerful, unprecedented national advertising by Lennox is devoted exclusively to selling home ownership—selling people on the idea of owning a new home . . . this year!



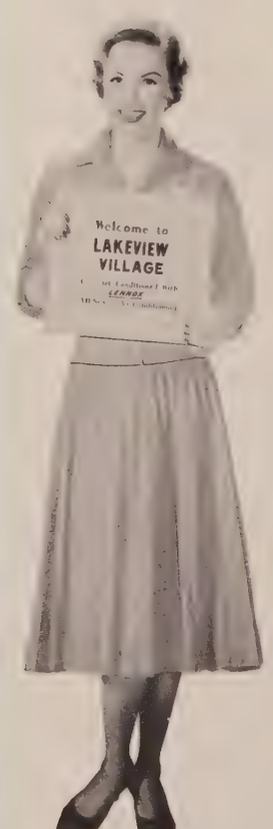
"THERE NEVER WAS A BETTER TIME to buy that new home of your own." Costly, big-space advertising by Lennox, in magazines like *Parents, Living for Young Homemakers, House Beautiful,* and *House and Garden,* takes this story to millions . . . talks in convincing terms about the many satisfactions of owning a new home . . . now! This unselfish effort by Lennox is sure to spark home buying in your area, help you sell more homes!

Exclusive AT THE HOME-SITE LEVEL

Complete new Lennox Model Home Promotion Kit—planned by experts and proven by actual use—all the tools you need to turn this Lennox-inspired new home interest into sales!

PERSONALIZED TRACT BROCHURES are tailor-made to fit your requirements and to promote the homes you build. Here is custom planning and designing at your service. Attractive four-color covers are imprinted with your name and other pertinent information. Pages of these brochures actually show blueprints of your homes, and sell advantages of your home development.





MISS LENNOX CUT-OUT HOSTESS is an eye-stopping, life-size display that greets your visitors, holds a card bearing any message you wish to convey. This and many other display and promotion ideas are yours in this sales-building promotion kit.

VOICE FOR MISS LENNOX is provided by this message repeater. As your prospect steps on a rubber mat in front of the hostess display, the message repeater is put into action and a short, tape-recorded message is heard from a loudspeaker. A novel idea, can be used many ways . . . helps you point out selling features effectively. Lennox kit is packed full of selling aids, including *newspaper ads and colorful billboard designs.* For full information, mail coupon.



Fill in...Mail now!

No other manufacturer offers you anything to match this sales-producing promotion kit. You owe it to yourself to learn all about this complete selling service. Write for free copy today!

LENNOX INDUSTRIES INC.
Merchandising Dept. HH
Marshalltown, Iowa

Please send me a sample of the Lennox Model Home Promotion Kit, along with complete details on its use.

NAME_____

FIRM_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

Lennox and only Lennox sells *for* you, not just *to* you

Exclusive ON THE NATIONAL LEVEL

Powerful, unprecedented national advertising by Lennox is devoted exclusively to selling home ownership—selling people on the idea of owning a new home . . . this year!



"THERE NEVER WAS A BETTER TIME to buy that new home of your own." Costly, big-space advertising by Lennox, in magazines like *Parents, Living for Young Homemakers, House Beautiful,* and *House and Garden,* takes this story to millions . . . talks in convincing terms about the many satisfactions of owning a new home . . . now! This unselfish effort by Lennox is sure to spark home buying in your area, help you sell more homes!

Exclusive AT THE HOME-SITE LEVEL

Complete new Lennox Model Home Promotion Kit—planned by experts and proven by actual use—all the tools you need to turn this Lennox-inspired new home interest into sales!

PERSONALIZED TRACT BROCHURES are tailor-made to fit your requirements and to promote the homes you build. Here is custom planning and designing at your service. Attractive four-color covers are imprinted with your name and other pertinent information. Pages of these brochures actually show blueprints of your homes, and sell advantages of your home development.





MISS LENNOX CUT-OUT HOSTESS is an eye-stopping, life-size display that greets your visitors, holds a card bearing any message you wish to convey. This and many other display and promotion ideas are yours in this sales-building promotion kit.

VOICE FOR MISS LENNOX is provided by this message repeater. As your prospect steps on a rubber mat in front of the hostess display, the message repeater is put into action and a short, tape-recorded message is heard from a loudspeaker. A novel idea, can be used many ways . . . helps you point out selling features effectively. Lennox kit is packed full of selling aids, including *newspaper ads and colorful billboard designs.* For full information, mail coupon.



Fill in...Mail now!

No other manufacturer offers you anything to match this sales-producing promotion kit. You owe it to yourself to learn all about this complete selling service. Write for free copy today!

LENNOX INDUSTRIES INC.
Merchandising Dept. HH
Marshalltown, Iowa

Please send me a sample of the Lennox Model Home Promotion Kit, along with complete details on its use.

NAME _____

FIRM _____

ADDRESS _____

CITY _____ ZONE ____ STATE _____



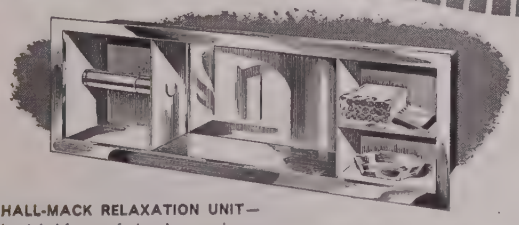
use

HALL-MACK®

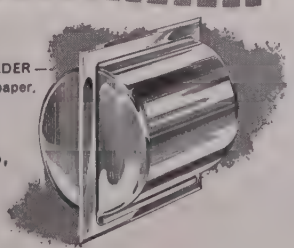
bathroom accessories in sparkling *chrome!*



RECESSED TOW'LESCOPE — concealed utility bar for drying nylons, lingerie—for guest towels.



HALL-MACK RELAXATION UNIT— is styled for comfort and convenience.



CONCEALED TOILET PAPER HOLDER — revolving hood protects, covers paper.

SOLD AT LEADING PLUMBING, TILE AND HARDWARE DEALERS EVERYWHERE

Here's a beauty treatment that will make you proud of the bathroom you design and build . . . year after year. Whether you are remodeling a "middle-aged" room — or planning a "new" bath, you'll find a fresh, bold beauty in every brilliantly polished Hall-Mack accessory that adds character and convenience to any bath. Hall-Mack gives you the best known name in bathroom accessories — over 30 years of quality leadership — complete lines to fit *every* budget — and a wide selection of new and unusual specialties that add "sparkle" to any bath. For quality, convenience and economy — you can always recommend *with confidence* Hall-Mack bathroom accessories.

HH-6

HALL-MACK COMPANY

1380 West Washington Blvd. • Los Angeles 7, California

☐ Please send your FREE color booklet of new bathroom ideas.

name_____

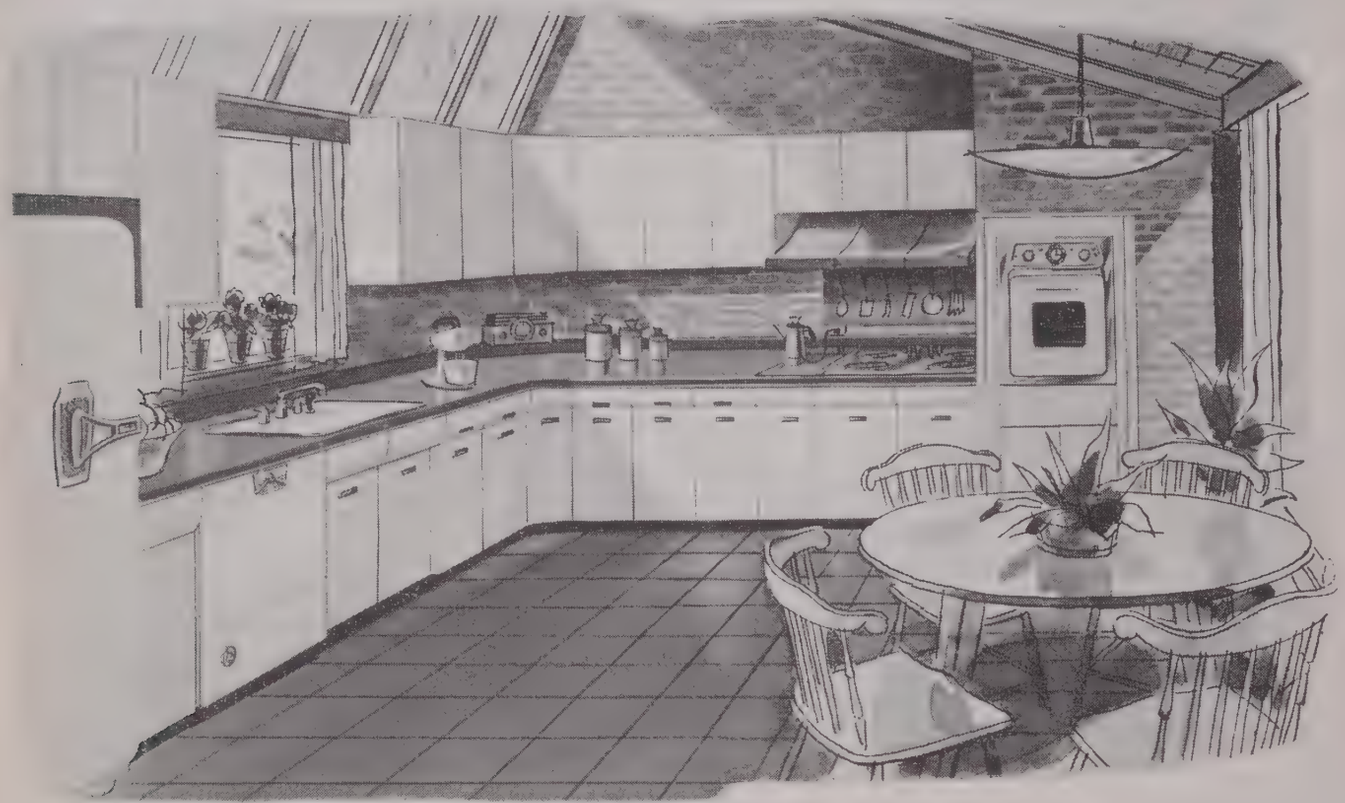
address_____

city_____ zone_____ state_____

New Beauty! New Features! More Flexibility! More Colors!

BRAND NEW CABINET LINE FROM KELVINATOR HELPS SELL NEW HOMES

Top Quality Steel Construction — Easy Installation — Priced Right!



The all-new, all-steel Kelvinator cabinet line has been particularly designed for builders. Here at last is a truly flexible line that will answer every kitchen installation problem. Now it is possible to easily achieve that luxurious custom look in kitchens that offer the most unusual size or shape problems. The completeness of the new Kelvinator line is of course the answer. There are sink cabinets, matching wall and base cabinets in a wide range of styles and sizes. Everything you need is provided . . . corner cabinets, combinations, revolving wall and base "Lazy-Suzans," peninsular cabinets and a variety of cabinets for built-in ranges. Get complete information on this all-new Kelvinator line, write to Kelvinator, Division of American Motors, Detroit 32, Michigan. Today!

MORE COLORS TO SELL WITH!

8 **DECORATOR COLORS** TO MATCH KELVINATOR APPLIANCES . . . *PLUS*

4 **ADDITIONAL COLORS** FOR MIX AND MATCH INTERIORS

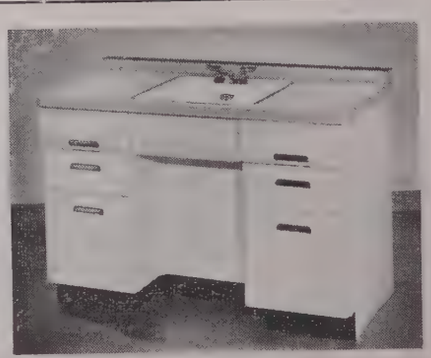
QUICKLY AVAILABLE FROM
14 STRATEGICALLY LOCATED FACTORY WAREHOUSES
PLUS ALL KELVINATOR ZONE AND DISTRIBUTOR WAREHOUSES

Now, Luxury Bathrooms for Middle-Income Homes!

KELVINATOR BATHROOM BUILT-INS

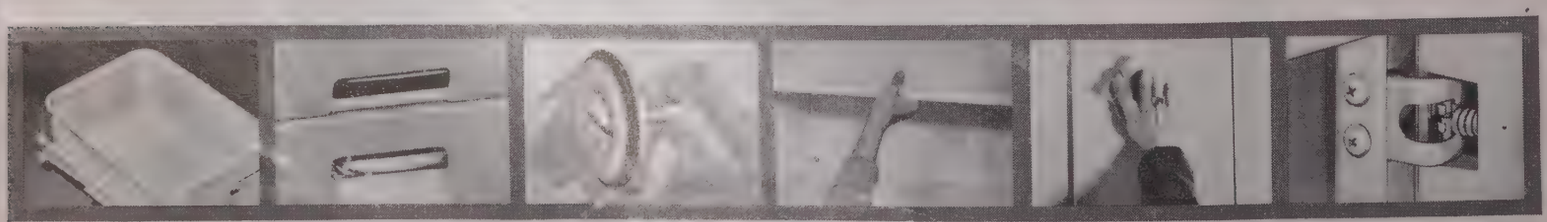
POWDER BAR, VANITY and LAVATORY CABINET COMBINATIONS

Beauty and practicality at a low price. All-steel cabinet with contrasting Formica tops.



Kelvinator

Division of American Motors • Detroit 32, Michigan



Deepest, single piece, rounded design drawer made. No corners to catch dirt.

Handsome recessed chrome handles pleasing to the eye—can't snag clothing.

Neoprene tires on nylon rollers assure permanent quiet and easy operation.

Adjustable shelves, a real cabinet feature, add more convenience for extra storage.

Bonderized steel, exclusive finishing methods for a smooth surface that endures.

Sturdy spring hinges hold doors fully open or closed, prevents accidental bumping.

for the Homes You Build...
in the Homes You Sell...

CELOTEX

REG. U. S. PAT. OFF.

Spun

WOOL BLANKETS

(REFLECTIVE OR REGULAR TYPES)

A Type to Meet Every Insulating Need, Every Cost Requirement!

Complete insulation has clinched thousands of home sales. And with the increasing demand for air conditioning in today's homes, prospective homeowners are more insulation-conscious and sales-responsive than ever!

The Celotex line of Spun Rock Wool Blankets includes insulation types to perform perfectly in every application. New advantages now make them more efficient, more desired than ever. "SPUN" PROCESS manufacturing produces longer, livelier fibers, providing even greater lightness, resiliency and effectiveness!

New Celotex Spun Rock Wool Blankets offer the uniform high quality, top insulating value, and permanent efficiency that prospects demand. Clean, rugged . . . with minimum cutting and fitting required. Two types . . . reflective and regular. Three thicknesses . . . full-thick, semi-thick, utility. All with vapor barrier and reinforced flanges for nailing or stapling. Be sure to specify Celotex Spun Rock Wool Blankets . . . for quality that convinces prospects their dollars have been wisely spent! Contact your Celotex Dealer, today.

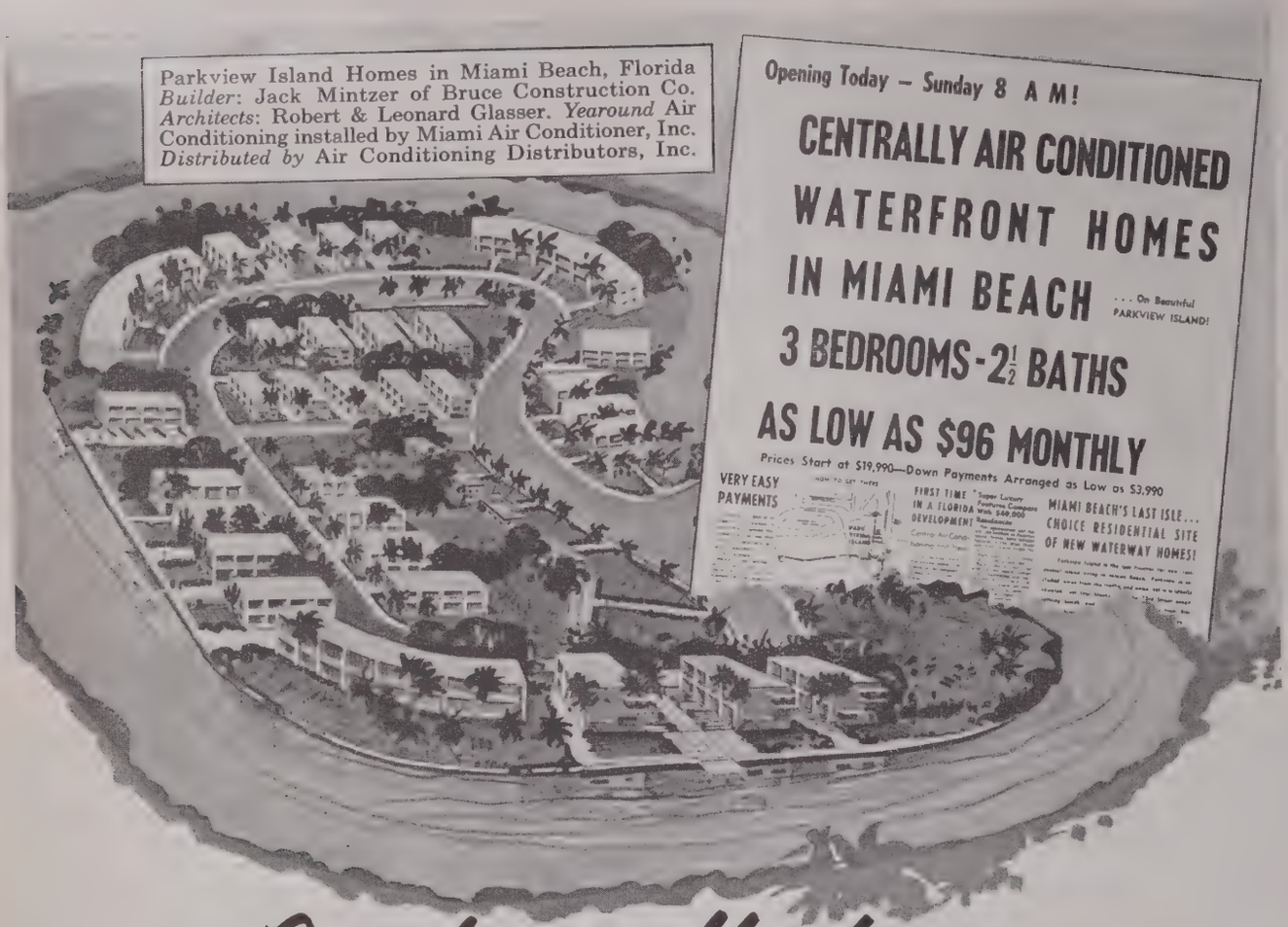
Build Better . . . Build with Genuine

CELOTEX

REG U. S PAT OFF

Spun **ROCK WOOL BLANKETS**

THE CELOTEX CORPORATION • 120 SOUTH LA SALLE STREET • CHICAGO 3, ILLINOIS



People really buy...

when homes have

Airtemp *YEAROUND* AIR CONDITIONING!

500 New Miami Beach Homes—all equipped with Airtemp *yearound* air conditioning (80,000 B.T.U. gas furnace and 3 H.P. waterless conditioner). Prices on homes start at $19,990. Low installation cost of Airtemp *yearound* air conditioning helps builder keep prices down.

AIRTEMP GIVES BUILDERS THESE BIG EXTRAS

- Chrysler Engineering for superior performance
- Complete Builder's Line of heating and cooling
- Hard-selling New Home Merchandising Program
- Factory-trained dealer service—nationwide

Phone your nearby Airtemp dealer for full details. He's in the Yellow Pages. Or write: Airtemp Division, Chrysler Corp., Dept HH-6-56, Dayton 1, Ohio.



22 homes sold opening day. Newspaper advertising (shown at top), plus strong Airtemp builder promotion aids, drew large crowds. Home buyers were enthusiastic about the air conditioning. No wonder! It was 20° cooler inside on opening day.

Airtemp DIVISION CHRYSLER CORP

THE *FORWARD* LOOK IN AIR CONDITIONING

HEATING FOR HOMES, BUSINESS, INDUSTRY



Crawford Corporation, Baton Rouge, La., provides builders with distinctive, modern homes—with selling prices ranging from $7,000 to $50,000.

"THOUSANDS OF Crawford HOMES WILL BE Hotpoint EQUIPPED IN 1956!"

The building industry recognizes W. Hamilton Crawford as one of America's leading manufacturers of high quality prefabricated homes. Mr. Crawford says—

"We selected Hotpoint for one good reason. The superior value and performance of Hotpoint Appliances are appreciated by everyone—prospective home buyers, appraisers, and lending agencies. People know you're giving them the best when they see the Hotpoint name."

Hotpoint Appliances offer you...

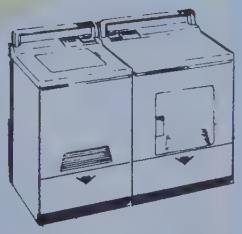
1. An unequalled reputation for superior quality that helps you sell your homes.

2. A complete variety of prices, models, and finishes for homes in *every* price category.

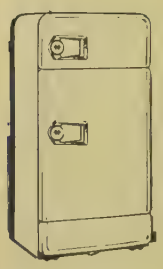
3. Maximum evaluation and higher mortgages from financing agencies.

4. Powerful advertising and merchandising support.

The Hotpoint name will help you sell and finance your homes—so contact your Hotpoint Distributor's BUILDER SPECIALIST for information about these famous appliances and the Hotpoint Kitchen-Laundry Design Service for builders!



Hotpoint Home Laundries are completely automatic—they'll wash and dry ALL types of fabrics!



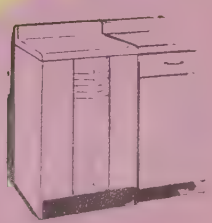
Hotpoint Refrigerator-Freezers feature "Big Bin" storage, Frost-Away defrosting, many other work-saving conveniences.



Hotpoint Built-In Appliances are available in Color-tones, Coppertone, and Stainless Finish!



For beauty and distinction—Hotpoint Color-tones or Classic White!



Hotpoint Table Top Water Heater—Famous Calrod® units assure Magic Circle® Heat!

Only Hotpoint Dishwashers offer Spot-Less Washing, Spot-Less Rinsing, Spot-Less Drying!



Famous Hotpoint Disposall® Food Waste Disposer—quiet and efficient!

Fast-heating Hotpoint Ranges cook everything in the book automatically!



look to Hotpoint for the finest-first!

RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · DISPOSALLS® · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS

HOTPOINT CO. (A Division of General Electric Company)



Now you can put the Built-In sell of Hotpoint "Living-Room" Kitchens in homes in All Price Ranges!

Hotpoint

"Living-Room" Kitchens are what the 1956 home buyer wants!

It's a fact that this year's prospects are looking for kitchens that are as warm and friendly and beautiful as the other "living" areas in the home—kitchens for living in and entertaining in, as well as kitchens that offer the very latest in work-saving convenience.

Cash in on this demand by including "Living-Room" Kitchens with Hotpoint built-ins in your home. In the higher 1956 home market, your Hotpoint "Living-Room" Kitchen will be your biggest sales feature—the one that makes prospects choose your homes over those of a competitor.

These glamour rooms will sell your homes faster—bring you speedier turns on your investment—and higher profits per home! When you build Hotpoint—you build in *sell!*

• **Widest variety of Models, Prices and Finishes—** Whether you build luxury homes or modest homes, you'll find the right combination of Built-Ins among Hotpoint's complete selection of models—in 5 beautiful colors and gleaming stainless finish.

PLUS

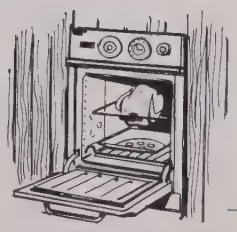
• **Maximum ease of installation**—Hotpoint Built-Ins are specially engineered to save you time, labor, and money.

• **Enthusiastic public demand for a famous brand name known as the "Finest."** Hotpoint's superior features and quality are sold to your prospects by powerful advertising—and proved by the outstanding performance of Hotpoint Appliances in millions of American homes. When prospects see Hotpoint Appliances in your houses, they know they're getting a well-built, well-equipped home.

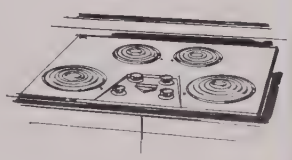
look to Hotpoint



Hotpoint Built-In Super Oven—Big enough to cook neal for 24 people! Rota Grill for barbecue treats. Eye level ontrols include automatic timing clock and electrical time neasure. Lower cost non-automatic model and de luxe double ven model also available.



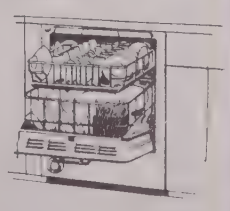
Hotpoint Built-In Surface Cooking Units—Feature Super 2600" Calrod® unit that cooks faster than *any* other gas or lectric unit. Available in 2-unit sections with remote-control, olor-lighted pushbuttons, and 4-unit section with self-contained, otary switches. Plug-In French Fryer, Griddle also available.



Hotpoint Built-In Refrigerator-Freezer—Combines he beauty of a built-in with the convenience and big capacity 12 cu. ft.) of a free-standing unit. Less expensive to buy and in- tall than other built-ins. Lower-cost, one-door models also vailable.



Hotpoint Built-In 24-Inch Dishwasher—At the touch f a button—automatic pre-rinsing. Spot • Less Washing, with fresh etergent in each of 2 washes. Spot • Less Rinsing, with super wet- ng agent in final rinse to prevent spotting. Spot • Less Drying to gleaming sparkle. 2 models.



In 1956, let Hotpoint "Living-Room" Kitchens speed up profitable home sales for you. You'll be surprised how little it costs to take advantage of the sales appeal of America's quality line of built-ins.

Hotpoint Built-Ins can be included in VA and FHA mortgages, so you can offer a complete Hotpoint kitchen to your prospects for only a few dollars a month.

Get the details from your Hotpoint Distributor's Builder Specialist soon!

or the finest-first!

Exclusive Hotpoint Spot-Less Dishwashing

SELLS HOMES FASTER—
Outmodes All Other Dishwashing Methods



- **Your prospects are PRE-SOLD on Hotpoint Spot-Less Dishwashing**—by consistent, hard-hitting NATIONAL ADVERTISING!
  The story of Hotpoint Spot-Less Dishwashing is being told in big, 4-color ads in national magazines—and by dramatic demonstrations on television! When women see the Hotpoint Dishwasher, they know they're getting fine equipment and a fine home.
- **Your prospects are PRE-SOLD** by confidence-building IMPARTIAL RECOMMENDATIONS!
  The Hotpoint Dishwasher is the ONLY Automatic Dishwasher recommended in the last 4 years by one of the nation's leading consumer research organizations! And it has been consistently featured in editorial articles appearing in leading consumer magazines.
- **Your prospects are PRE-SOLD** by Hotpoint's unequalled PERFORMANCE and FEATURES!
  Women want Hotpoint's wonderful work-saving features like pushbutton control and separate Roll-R-Racks. Consumer surveys prove conclusively that **homemakers prefer Hotpoint's separate Roll-R-Racks 4½ to 1 over competitors' pull-out-tubs!**
- **Hotpoint Dishwashers are easy to install**—Both drain and hot water connections can be made from the front, with gravity or pump-drain Dishwasher in place.
  Available in 5 Colortones, Coppertone, or Customline Satin Chrome Finish. Capitalize on the terrific "home selling" appeal of Hotpoint Dishwashers! Contact your Hotpoint Distributor's BUILDER SPECIALIST for the story.

look to Hotpoint for the finest...first!

HOTPOINT CO. (A Division of General Electric Company) 5600 [illegible]



Exclusive Spot-Less Dishwashing

Women are *sold* on this wonderful dishwashing method. *Two 5-minute Spot-Less washes*—with fresh detergent each time—scrub away every trace of food and film. *Spot-Less second rinse* eliminates spots on glass and silver! Super wetting agent is injected in second rinse—water spreads so smoothly, it can't form drops, can't dry as spots.

Your eyes tell you! Spotted glass (left) was rinsed in plain water. Sparkling glass (right) was rinsed the new Hotpoint Spot-Less way.





FORMICA® "takes it" standing up

Note the use of Formica's new Milano pattern on "*wall areas*" of this kitchen as well as on the cabinet tops.

Did you know that Formica can be applied to "Vertical Surfaces" with our new adhesive at a lower cost than many other wall surfaces?

New cements, new moldings, and new techniques have all combined to cut costs of Formica wall areas.

Now you can carry the famous Formica color patterns as used on cabinet tops onto your "Vertical Surfaces" for complete color harmony.

To get helpful information on how to apply Formica to "Vertical Surfaces," write Formica 4586 Spring Grove Ave., Cincinnati 32, Ohio for Form No. 670 or call your Formica Fabricator as listed in the Yellow pages in Your phone Directory.

Customers buy Formica because it is a brand name they know and trust.

DEMAND THIS CERTIFICATION

We protect this faith in our product by certifying every sheet with a wash-off Formica marking. It is for your protection and guarantee that you are getting genuine Beauty Bonded Formica.

This mark certifies genuine

RUB OFF WITH LOTS OF BAR SOAP ON A DAMP CLOTH

Beauty Bonded FORMICA

Guaranteed by Good Housekeeping

Seeing is believing. If this wash-off identification is not [illegible] surface it's not FORMI[illegible]



Designed by George Cooper Rudolph, A.I.A.

"COLORFUL ASBESTOS SIDING ADDS INTEREST TO THIS SPLIT-LEVEL"



Yes, those siding shingles *are* asbestos, smartly textured, smartly styled, and applied with accentuated shadow lines to add interest to the entire exterior. This house has real sales appeal. Notice how well the asbestos shingles harmonize with the brick wall. Gray siding, yellow trim for accent, and a white asbestos roof blend in perfect color styling. A minimum of upkeep expense for this homeowner! His asbestos exterior is fireproof, rotproof and never needs paint to preserve it. For more information on the new beauty and design possibilities with asbestos cement products, write for your copy of "Advanced Designing – 1956".

ASBESTOS CEMENT PRODUCTS ASSOCIATION • 509 MADISON AVENUE, NEW YORK 22, N. Y.



NO CEILING ON COMFORT HERE !

But, plenty of ceiling on cost! That's because lightweight, easy-handling Chase copper tube for radiant heating *installs faster!* Perfectly tempered, it easily unrolls into position on ceiling or floor. Comes in long 60 and 100-foot lengths that result in fewer joints. Connections are quickly made with simple soldering techniques.

Even the rugged carton for Chase copper water tube is designed to speed handling...save time! It's color-coded for easy identification of type and size. Has a center hole big enough for a firm grip. Can be stacked, rolled or carried with ease!

Proof that Chase copper water tube cuts installation time is the fact that it is being used in many of the largest housing developments where over-all costs *must be low!*

If it's radiant heating, be sure the system is made with Chase copper tube and solder-joint fittings.

Chase

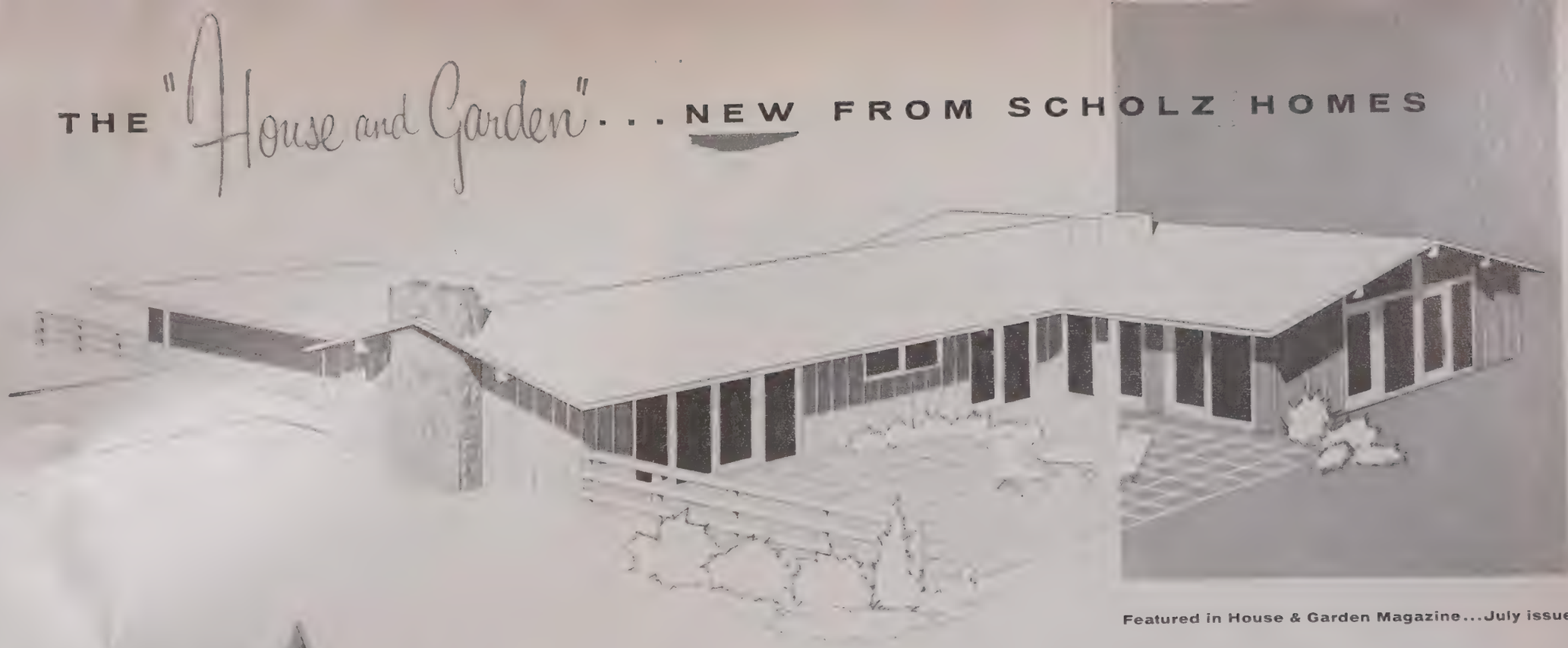
BRASS & COPPER CO.

WATERBURY 20, CONNECTICUT • SUBSIDIARY OF KENNECOTT COPPER CORPORATION

The Nation's Headquarters for Brass, Copper and Stainless Steel

Atlanta Baltimore Boston Charlotte Chicago Cincinnati Cleveland Dallas Denver Detroit Grand Rapids Houston Indianapolis Kansas City, Mo. Los Angeles Milwaukee Minneapolis Newark New Orleans New York Philadelphia Pittsburgh Providence Rochester St. Louis San Francisco Seattle Waterbury

THE "House and Garden" . . . NEW FROM SCHOLZ HOMES



Featured in House & Garden Magazine...July issue



the quality . . the design . . sells itself . .

California contemporary

SCHOLZ HOMES, INC. • 2001 N. WESTWOOD • TOLEDO 7, OHIO
FOOT OF CHRISTIANA AVENUE • WILMINGTON, DELAWARE





Assembly of Flexivents for an Archer project. "The pre-installation assembly of units is a big factor in expediting our building schedules," reports Mr. Archer.



Workmen slip 6-sash Flexivent group into place. "Housewives like ease and safety of being able to clean both sides of window from inside the home," says Mr. Archer.

storage problems,

In all parts of the country men who build homes for sale . . . and men who furnish those homes . . . are turning to Andersen Flexivent Windows. Like Mr. Archer and Mr. Goodall they want Flexivent's extreme versatility, high quality, low cost and proven customer appeal. As Mr. Goodall says, "Whether they're project builders or prospective homeowners, people like the style, flexibility and economy of Flexivent Windows." Look into the advantages offered by Flexivents for the next project you plan or build.

It's easy to get complete information on double glazings, screens, insulating glass, and other features of Andersen Flexivents. Just see your lumber and millwork dealer, Sweet's Files or write Andersen Corporation. WINDOWALLS are sold throughout the country, including the Pacific Coast.

Andersen Windowalls

TRADEMARK OF ANDERSEN CORPORATION

ANDERSEN CORPORATION • BAYPORT • MINNESOTA

THERE'S A NEW TREND IN BATHROOMS!

Holiday Motor Hotel
Minneapolis' Newest and Finest

Here the guest enjoys the convenience and comfort of spacious, carpeted rooms, 24 hour room service, television, telephone and "dream bathrooms" with fixtures by U/R.

Designed & constructed by Sebco, Inc.
Manager: R. K. Souther
Plumbing & Heating Contractor: Harry S. Horwitz & Co., Inc.





Shangri-La Hotel Courts
Mobile, Alabama

This beautifully appointed traveler's haven emphasizes old fashioned Southern hospitality with every modern comfort, including swimming pool and bathrooms with U/R fixtures.

Consulting Architect: W. I. Rosamond, Columbus, Miss.
Manager: L. N. Sawyer
Building Contractor: G. E. Bass & Company, Jackson, Miss.
Plumbing Wholesaler: Southern Pipe & Supply Co., Meridian, Miss.

In luxurious motor hotels, you'll find the World's Finest Bathroom Fixtures!

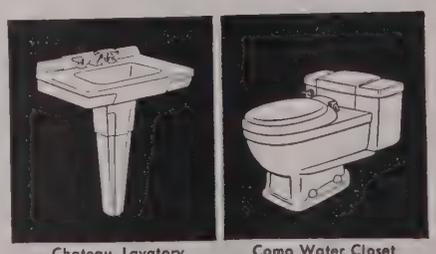
A happy experience awaits the weary traveler in these wonderful, new motels which offer the utmost in service, comfort and convenience . . . including bathrooms with fixtures of the latest design, by Universal-Rundle.

Yes, in motor hotels and apartments, in housing projects and individually built homes, the trend is to Universal-Rundle . . . pioneer in bathroom fixture design for 55 years.

U/R developed techniques to produce fixtures of the whitest white—by actual scientific tests. U/R made the first colored bathroom fixtures which are color-matched closer than the eye can see. U/R perfected a one-fire "Hi-Fired" method of firing vitreous china, resulting in harder than steel surfaces for lasting loveliness.

Write for complete catalog showing models, rough-ins, and specifications. Also, see the U/R section in Sweet's Architectural and Light Construction Files. Universal-Rundle Corporation, 409 River Rd., New Castle, Pa.

NEW-STYLED FIXTURES
for home, institutional, commercial and industrial use.



Chateau Lavatory — Como Water Closet

THE WORLD'S FINEST BATHROOM FIXTURES BY

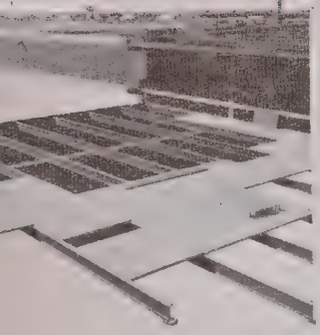
Universal U/R Rundle

Plants in Camden, New Jersey; Milwaukee, Wisconsin; New Castle, Pa.; Redlands, California; Hondo, Texas



1. BUILDING . . . to help you build

Construction has progressed rapidly since this picture was taken at the new Armstrong plant in Macon, Georgia. Not only is the building under roof but machinery is being installed to produce increased supplies of Armstrong Temlok Roof Deck, Temlok Sheathing, and Cushiontone . . . building materials that add value while cutting costs of your '56 homes. Turn the page for a report on one of these modern materials.



2. PRODUCTION OF TEMLOK SHEATHING TO BE INCREASED

It won't be long until you can be supplied with more Temlok Sheathing. The new production facilities in Macon will soon be turning out a greater quantity of this popular building material that helps you build faster, easier, and more profitably. More and more builders are using Temlok Sheathing to add extra strength and insulation value to their houses.

3. MUCH EASIER TO HANDLE THAN WOOD

Temlok Sheathing comes neatly wrapped in kraft paper—six 2′ x 8′ x $^{25}/_{32}$″ boards to the package. This means each time a carpenter handles a bundle of Temlok, he's moving 96 square feet of sheathing. Compare this to grappling 96 square feet of lumber. Removed from the package, individual Temlok boards are easy to handle, fast to install, and strong and durable on the job.

One easy-to-handle package covers 96 square feet of wall area.



To cover same area with wood, carpenters have to carry 16 boards 1″ x 6″ x 12′ long.







Our continued use of Amweld Steel Doors, Frames and Closet Units is evidence of our satisfaction with the low cost, easy installation and durability of these products . . . labor savings of 60% on original installation plus the elimination of maintenance call-backs are two reasons for this preference. The third reason is extremely favorable public acceptance.

Joseph Goldman, Vice Pres.
Charge of Construction







American Community Builders

choose

AMWELD® DOORS

One of America's top builders, developers of beautiful Park Forest, Illinois, specify Amweld Steel Doors and Frames in their development of medium priced, contemporary homes. Producers of quality homes that are priced to sell, A.C.B. find that low installation cost and elimination of maintenance call-backs, added to extremely favorable public acceptance, make Amweld Steel Doors and Frames and Closet Units a natural in their homes. Amweld is truly THE LINE DESIGNED WITH THE BUILDER IN MIND.

For further information, and a complete new catalog, write t

AMWELD® BUILDING PRODUCTS DIVISION

THE AMERICAN WELDING & MANUFACTURING CO., 330 Dietz Road, Warren, Ohio

3P-114

...n U.S.A.



Excel Cabinets by Ace Utilities

suburban *America's Finest Built-In Range*

100 COOK-TOP COMBINATIONS! Suburban offers you more than 100 different combinations of cooking tops—widest choice in the industry!

NEW INTERIOR! Suburban's exclusive new Caribbean Blue oven interior adds even more eye-appeal to stop your style-conscious prospects.

SAVES ON INSTALLATION! One-piece slide-in oven. Easy-to-use marking templets furnished with flush mounted cook tops.

SAVES TIME, LABOR! Same size cabinet opening fits both Gas *and* Electric ovens, cook tops

COMPLETE COLOR CHOICE! Stainless Steel plus seven smart decorator colors in lifetime porcelain enamel—including the exclusive Suburban Copper-Tan . . . with all the luxury of copper and none of the upkeep. Interchangeable color panels.

COMPETITIVELY PRICED! . . . Yet Quality-Built—America's Finest.

CONSUMER ACCEPTED! More Wife-Saver Features than any other built-in—and nationally advertised every month of the year!

write for details today!

Samuel Stamping & Enameling Co., Dept. HH-46, Chattanooga, Tenn.

At no cost or obligation to me, please rush complete information checked below:

Suburban Gas Built-Ins ☐ Suburban Electric Built-Ins ☐

Name _____

Address _____

City _____ State _____

BATHROOM FIXTURE COLORS FROM NATURE'S STUDIO



GREEN
OF A SHALLOW SEA

Choose bathroom fixtures in cool, refreshing Sea Green. Surround them with nature tones of yellow and chartreuse with accents of warm red, and you have a personal invitation to luxurious bathing!

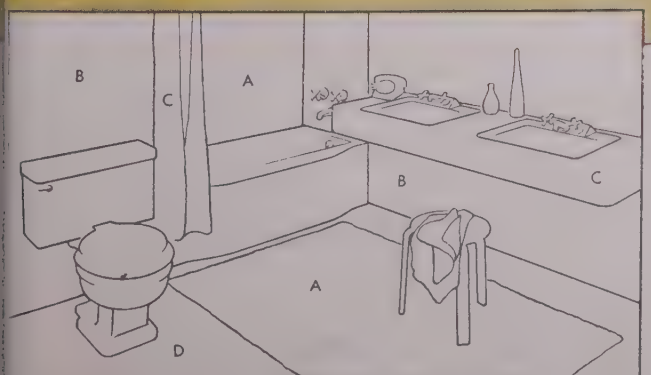
Briggs Beautyware fixtures blend nicely with your own accessories and color changes, too. And the practical features of Beautyware include deep contour lavatories—and a stainproof finish on all fixtures that stays bright and easy to clean.

In every way, your choice of Briggs Beautyware will reflect your good taste in bath fixtures and bathroom color decorating.

In Beautyware Sea Green— *Marquette Tub, Carlton Closet, Twin Lowell Lavatories*



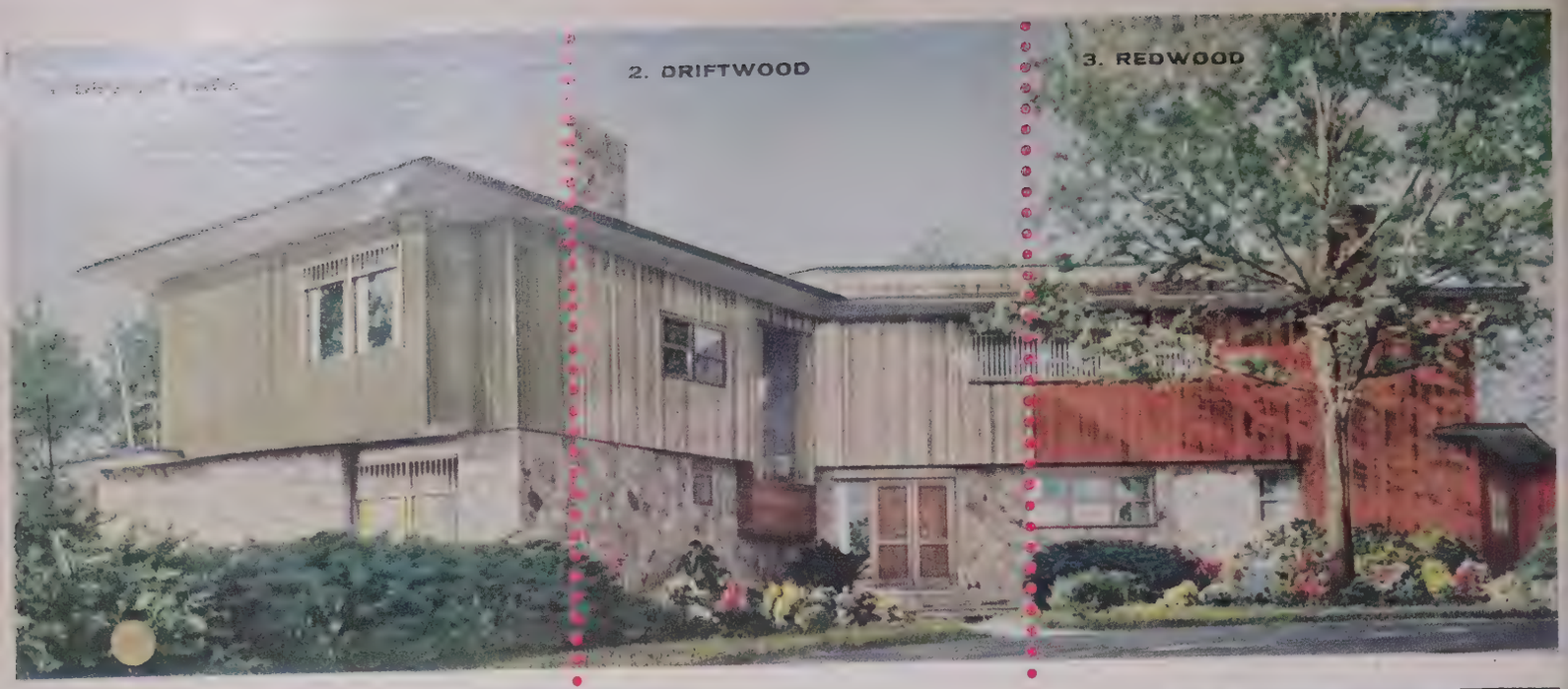
Color styling by Howard Ketcham, nationally famous color engineer



A - Sea Green *B - Chartreuse* *C - Flame Red* *D - Yellow*

Other decorator colors compatible with Sea Green are: Beige,

BRIGGS BEAUTYWARE



Now . . . you can specify Rez in 13 fashion colors

REZ–MOST COLORFULLY COMPLETE LINE OF NATURAL WOOD FINISHES!





















We finished a contemporary home 13 different ways to show how easily *you* can create *custom effects* for clients using the 13 Rez fashion Color Tones.

Wood becomes a *new material*—usable as never before! For Rez gives *any* wood *any color effect* desired, plus lasting protection against warping, swelling, cracking—all without masking the natural grain beauty.

In fact, the Rez family of fine finishes answers every wood finishing probl
We sugge
unusual benef
more being s
beauty in wood.

For details on the Rez
scription Wood Finishing
Service write Monsanto, St. Louis, Mo., Rez, Dept. 4i8.



Inside, too, Rez brings new beauty *in depth* to wall paneling, cabinetry. *Brushes* on easily, dries to a *custom finish.*

Rez is made by MONSANTO where creative chemistry works wonders for you

Laux Rez: Reg. U. S. Pat. Off.



Bellcroft Estates, Bellmawr, N. J.
Developed by Cardinal Homes, Inc.
Attic fans by Emerson-Electric
Builder: Altschuler and O'Dell
Designer: Morris Altschuler
Electrical Contractor: S. Peskin and Sons

Build more sell into your new homes with new Emerson-Electric attic fans

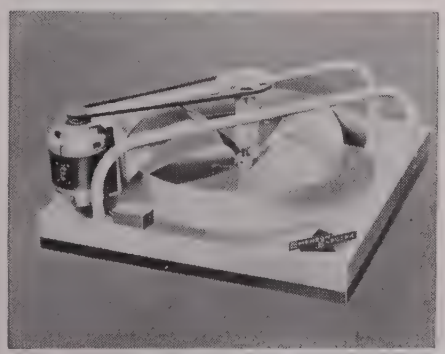
Prospects for your new homes more readily become buyers when they see that you are featuring Emerson-Electric attic fans as "standard equipment." It gives them added assurance that you are offering quality throughout.

Here is the very best, yet a rock-bottom priced installation that pays large dividends in luxury living. It will help to close many sales. And, the long-life features of Emerson-Electric attic fans assure years and years of trouble-free summer comfort. They are designed for quick, inexpensive installation.

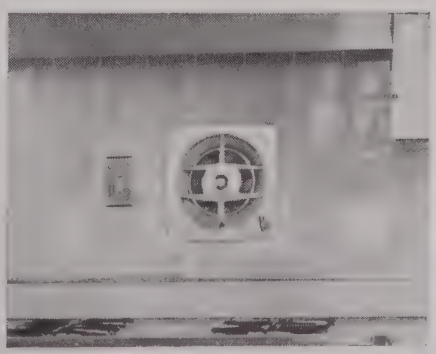
Write for complete data—ask for Fan Bulletin No. 1025
THE EMERSON ELECTRIC MFG. CO., ST. LOUIS 21, MISSOURI



Typical narrow-hall installation of Emerson-Electric ACTIVE-AIR attic fan. Provides summer comfort throughout the home—restful sleep even on hottest nights.



New 24" and 30" ACTIVE-AIR attic fans. The 24" fan, 5200 C.F.M., list price is only $76.55, ceiling shutter list $27.85; list price of 30" fan, 7000 C.F.M., is $85.30, ceiling shutter list $31.00.



You put added "sales appeal" in your homes with the new 8" ACTIVE-AIR ventilator in kitchens, bathrooms and utility rooms. For wall or ceiling installation, mirror-finish grille—list price $23.75.

All backed by the famous 5-YEAR factory-to-user guarantee at no extra cost!

ACTIVE AIR

Emerson-Electric

of St. Louis • Since 1890

When interior styles change

will your homes be selling you?

Installing Milcor Casing Bead is one way to make sure they do

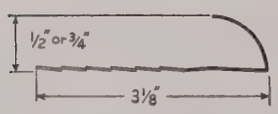
Interiors with Milcor Casing Bead will be good design for years to come. Owners will always appreciate the simple beauty that harmonizes with modern interior decoration. They like the feeling of spaciousness that Milcor Casing Bead gives to a room. Women are particularly attracted to it because it is easy to dust and keep clean.

Remember that Milcor Casing Bead is an integral part of the plaster construction — tied into the plaster by expanded-metal flanges.

The house you sell today builds your reputation tomorrow — and brings new prospects your way, as the happy home-owner tells his friends about "our builder."

Milcor Catalog No. 254 is available upon request.

MILCOR® Casing Bead



Cross section of Milcor No. 4 expansion casing bead.

Milcor Casing Bead is available in a variety of styles — in solid- and expansion-wing types. Shown is Milcor No. 4 Expansion Casing Bead.

M-182

INLAND

INLAND STEEL PRODUCTS COMPANY

DEPT. F, 4057 WEST BURNHAM STREET • MILWAUKEE 1, WISCONSIN

OFFICES IN: BALTIMORE • BUFFALO • CHICAGO • CINCINNATI • CLEVELAND DALLAS • DETROIT • KANSAS CITY • LOS ANGELES • MILWAUKEE MINNEAPOLIS • NEW YORK AND ST. LOUIS.

AIR CONDITIONING SELLS TODAY'S HOMES



"We're building 368 homes— all air conditioned, because buyers demand it"

say builders D. E. Lunt and C. C. Thomason of Del Rancho Homes, Irving, Texas.

"Home buyers today are demanding the comfort and convenience found in air conditioned homes," says Mr. Lunt. "That's why my partner and I are building air conditioning into every one of the 368 homes in our developments."

Lunt and Thomason are building homes priced from $13,000 to $18,000 in Irving and Carrollton, Texas.

"We've often heard a buyer comment that air conditioning was the difference that gave us the sale," says Mr. Thomason.

THESE ADVANTAGES SELL TODAY'S AIR CONDITIONED HOMES:

Year-round comfort • Less cleaning and redecorating
Street noises eliminated • Basement humidity reduced
Odors removed • Better sleep • Higher resale value

Sales resistance falls flat when you point ou the advantages of living in an air conditione home. Home buyers today know that res dential air conditioning is here to stay. That why successful builders all over the countr are keeping ahead of competition and sellin homes faster by including year-round air con ditioning in the homes they build. It's th modern way to *sell* the prospect.

Why you should insist on units charged with "Freon"*



Mr. Thomason and Mr. Lunt beside the installation of a 3-ton Gibson unit. Even on hottest Texas summer days this unit, charged with "Freon", maintains a cool 68° indoor temperature.

Be sure to specify Du Pont "Freon" refrigerants for the equipment you select to air condition the homes you build.

Building codes everywhere endorse "Freon" refrigerants. They are *safe*—nonflammable, nonexplosive, virtually nontoxic. For nearly 25 years Du Pont has manufactured "Freon" to strict laboratory standards. The result is a product of uniform purity which contributes to long, efficient, trouble-free service for all types of air conditioning equipment. "Freon" refrigerants are the most widely used of all refrigerants; there is one for every type and size of air conditioning equipment.

Learn how air conditioning has helped others sell homes. Send for your copy of the Du Pont brochure, "What Successful Builders Think of Home Air Conditioning." For your free copy write to E. I. du Pont de Nemour & Co. (Inc.), "Kinetic" Chemicals Divisio 1212, Wilmington 98, Delaware.

1931 KINETIC 1956

FREON

REG. U. S. PAT. OFF.

SAFE REFRIGERANTS

**"Freon" is Du Pont's registered trade mark for its fluorinated hydrocarbon refrigerants.*

DU PONT

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Color Style your homes

with these standard

REPUBLIC STEEL

products

...with Truscon "paint to match" Steel Windows

...with new contemporary colors of Republic Steel Kitchens

...with Truscon Steel Doors in your choice of colors

REPUBLIC

REPUBLIC STEEL

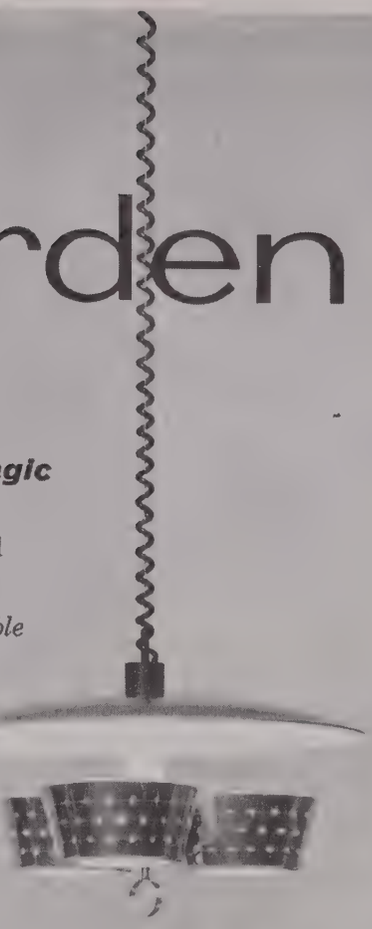
World's Widest Range of Standard Steels

decorative lighting by Virden

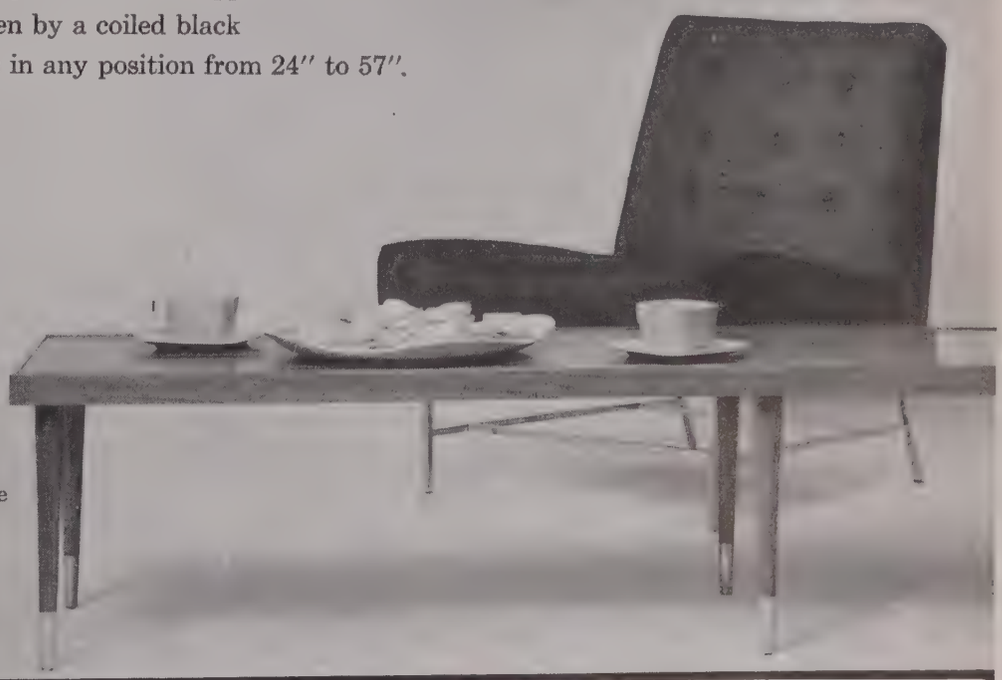
For new homes or old—
this Virden fixture works selling magic

Smart, handsome Virden lighting will help you sell your homes. Buyers today are style-conscious, and the more you put in your homes, *at a reasonable cost*, the easier they will be to sell.

This reel-concealed, pull-down fixture is one of the best selling tonics you can give your homes. The smartly styled 20″ top reflector and the spotlights are finished in gleaming brass . . . a finish that fits any decor. A thin, strong cable that disappears into the canopy is hidden by a coiled black cord. Fixture holds in any position from 24″ to 57″.



This is just one of the many styles of Virden fixtures that will give your home that selling plus. Fill out the coupon below to learn about all the other decorative lighting fixtures by Virden.



Write today for Miniature Booklet No. 56 showing all of the popular Virden styles, including the Virden line of pull-down fixtures and where to buy them.

Member of American Home Lighting Institute

VIRDEN Lighting

Underwriter of Operation Home Improvement

John C. Virden Co., Dept. HH-6, 6103 Longfellow Ave., Cleveland 3, Ohio

Please send me Miniature Booklet No. 56.

Name_____

Address_____

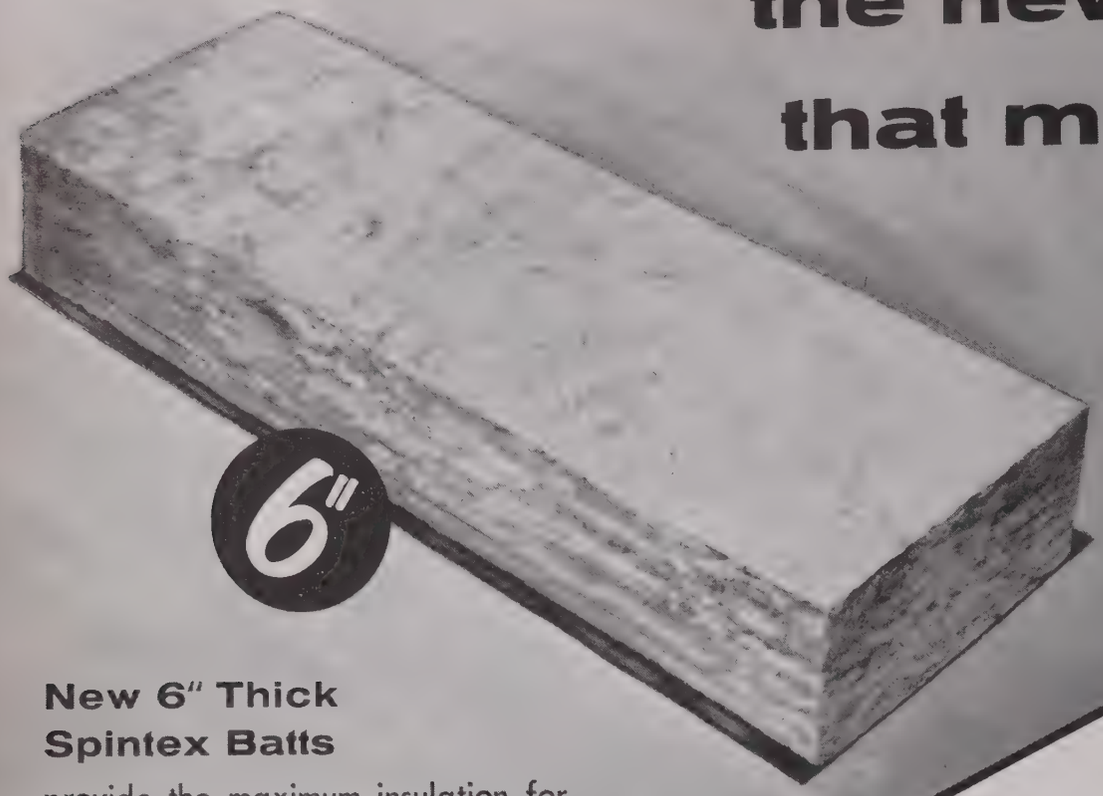
City_____ **Zone**____ **State**____

Occupation_____

Johns-Manville Presents...

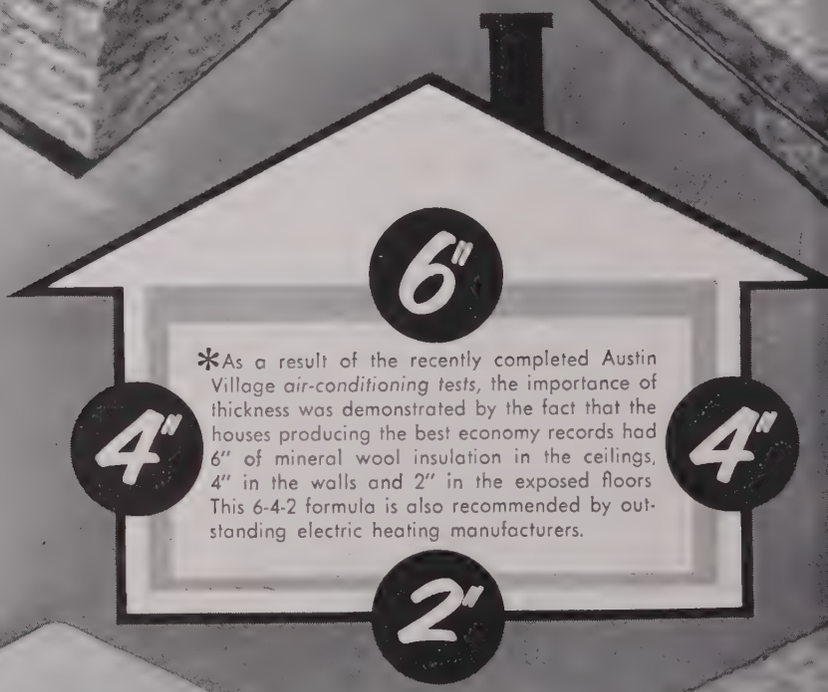
the new line of

that meets the



New 6" Thick Spintex Batts

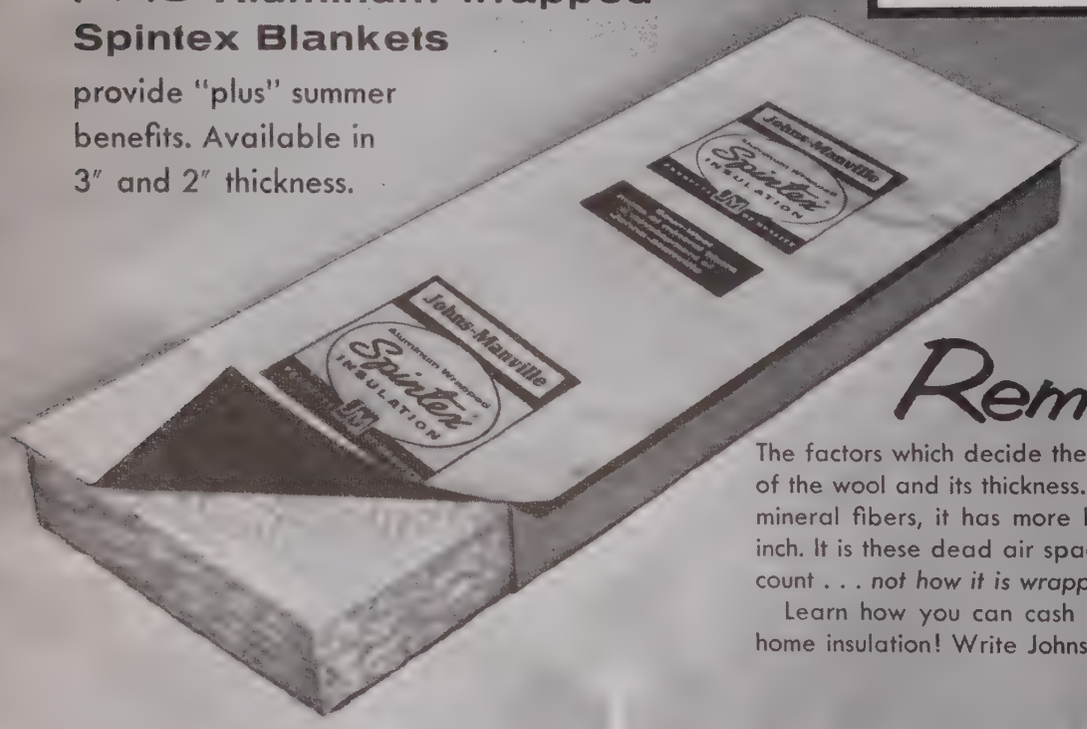
provide the maximum insulation for ceilings. A "must" for air-conditioned and electrically heated houses.



*As a result of the recently completed Austin Village *air-conditioning tests*, the importance of thickness was demonstrated by the fact that the houses producing the best economy records had 6" of mineral wool insulation in the ceilings, 4" in the walls and 2" in the exposed floors This 6-4-2 formula is also recommended by outstanding electric heating manufacturers.

***Plus* Aluminum-wrapped Spintex Blankets**

provide "plus" summer benefits. Available in 3" and 2" thickness.



Remember!

The factors which decide the efficiency of an insulation are the quality of the wool and its thickness. Because the new Spintex is made of finer mineral fibers, it has more heat-stopping dead air spaces per cubic inch. It is these dead air spaces and the thickness of the insulation that count . . . *not how it is wrapped!*

Learn how you can cash in on this important, new development in home insulation! Write Johns-Manville, Box 158, New York 16, N. Y.

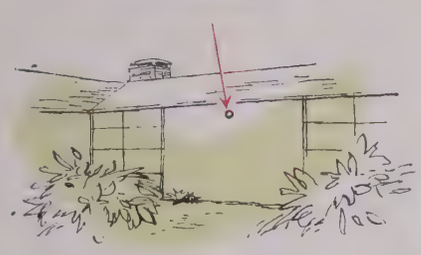
JOHNS-MANVILLE
JM
PRODUCTS

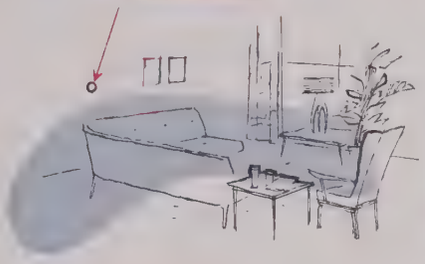
Honeywell Electronic Moduflow varies the temperature inside as the weather changes.













1. Electronics

New outdoor Weathercaster is *eight times* more sensitive than ordinary thermostats; continually adjusts indoor thermostat to compensate for changes in outdoor temperature.

2. Temperature

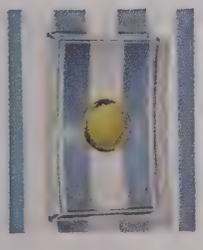
With this beautiful Golden Circle Thermostat, day and night indoor temperatures are set *once*. Thereafter, the outside thermostat raises or lowers settings automatically.

3. Time

This handsome electronic wall-clock automatically lowers night temperature for comfortable sleeping, fuel savings. Available in chrome, copper or ebony black.

with Electronic Moduflow

Add these other Honeywell features to your homes





Tap-Lite Wall Switch

Completely new. Tap—it's on! Tap—it's off! Transparent wall plate makes it easy to decorate with wallpaper, drapery material, or the colored inserts supplied with each switch. Adds a low cost feature to every room.





Fire-Belle Alarm

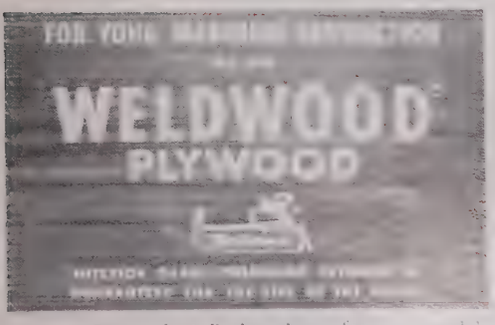
Attractive fire alarm panel is wired to fire-detector elements in attic, basement, closets, etc. Should fire start, bell rings and a light goes on, locating the fire instantly. An impressive home safety feature.

Electronic Moduflow by MINNEAPOLIS **Honeywell**



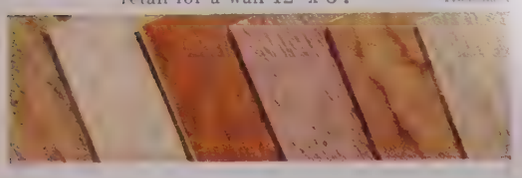
Weldwood paneling helps sell homes. V-Plank, shown here, gives this whole room an air of charm and spaciousness.

Watch sales resistance come down —when Weldwood V-Plank goes up!



Free walnut display plaque for your model home features the famous Weldwood guarantee for interior paneling. A powerful selling aid—for Weldwood is a name the public knows and respects.

6 fine V-Plank woods: walnut, $85; K[illegible] $79; mahogany, $79; Samara*, $52[illegible] $79; oak, $79; prices are approximate retail for a wall 12′ x 8′.



What woman could help falling in love with your model home—when she sees the warmth and snug simplicity of this fireplace wall? And what practical male could keep from admiring those modern-as-tomorrow built-ins? Yet all the sales-quickening cherry V-Plank* shown costs only $105.

[illegible] about labor costs? Don't let that [illegible] of random planking fool you! V-Plank is actually 4′ x 8′ x ¼″ thick panels that have been v-grooved for that plank effect. Nail through the grooves (they fall on 16″ centers) and you won't have any nail hole problem either.

And V-Plank is expertly prefinished. No staining, waxing, priming or painting. Just nail it up—and fill your fountain pen; because the dotted line on that sales contract won't be blank very long.

See V-Plank and other Weldwood paneling at your lumber dealer's, or at any of our 87 offices in principal cities. In Canada: Weldwood Plywood, Ltd.

WIN A TRIP TO EUROPE! In the big Weldwood Builder Contest. A 10-day European holiday for two—via TWA! Over 100 other prizes! Send coupon for details—NOW!

Weldwood®

[illegible]ELING

[illegible]ood Corporation

[illegible]own Name in Plywood

United States Plywood Corporation
55 West 44th Street, New York 36, N. Y.

Please send FREE copy of the folder about Weldwood V-Plank ( )

Send details on the big Weldwood Builder Contest ( ) HH6-56

NAME.....

FIRM.....

ADDRESS.....

CITY.....ZONE.....STATE.....


Don't be fooled by light reflection demonstrations. It's heat (not light) reflective power that counts in reflective insulations—and that's what you get from Silvercote. Fifteen layers of millions of tiny aluminum flakes bonded to a heavyweight sheet give Silvercote the heat-reflective power of a million miniature mirrors.
Silvercote is a natural insulation for the air conditioning age. Properly installed it keeps homes up to 10% cooler in summer, cuts air conditioning equipment and operating costs; saves fuel warmth in winter, too. It's available in rolls, or as a facing on brand-name blankets.
Silvercote is a "breather" sheet—many times more permeable than required for classification as such. Also available as a vapor barrier.
Write for a free sample, today—
Silvercote Products, Inc.,
161 East Erie Street, Chicago 11, Ill.
REFLECTIONS
CAN FOOL YOU...
(and so can reflective insulations)
It's heat (not light) reflective power that counts...and
SILVERCOTE
has the heat reflective power needed—especially in air conditioned homes!

Six reasons why G-E built-in





5 Mix-or-Match colors

California builder sold 132 homes in 22 days. He writes "G-E built-ins and color did it." The response to these $13,500 to $17,500 homes at West Covina is one of dozens of examples of how colorful General Electric ranges help close the sale for builders.



"General Electric appl… our homes" comes the enthusiast… …ers in the Chicago area. Here is a cana… …ectric built-in range in a Brynhaven Happ… …es up the kitchen, makes selling the rest of … easy.



"Out of 36 homes, 30 ordered built-in ranges" wired salesmanager of Currey—a successful Denver, Colorado development. "And," he adds, "only one specified white." Home builders coast to coast agree G-E built-in ranges are selling homes almost on the strength of the kitchen alone.

ranges belong in your kitchens

Mix-or-Match colors give the range and its surroundings an expensive "decorator" look that helps attract prospects. Ovens and surface units are also made in satin chrome and stainless steel.

Easily installed. Surface unit assembly fastens with a few thumb screws.

Spacesaving G-E built-ins don't take space for separate broiler. So they allow more storage room.

Twin oven–venting system keeps cabinets and walls from streaking.

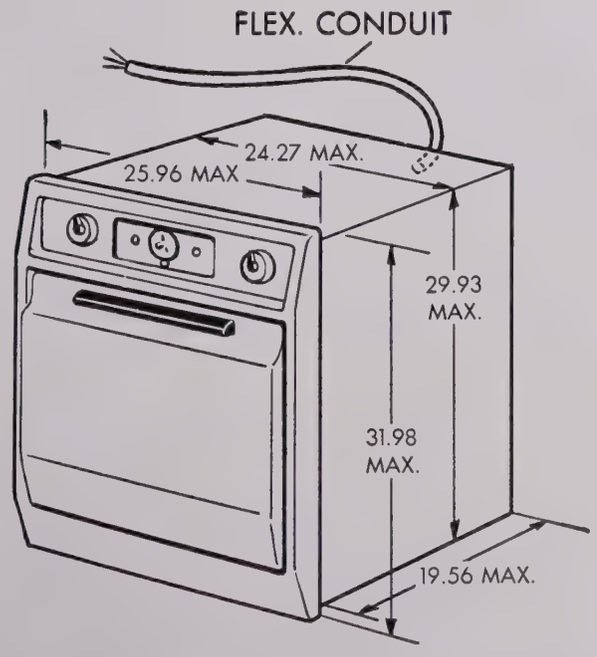
Popular with women. 55 out of 100 questioned said they believe General Electric makes the best appliances.

More features. Pushbuttons, big wide-opening ovens. "Focused Heat" broilers. Four widely spaced top units. For details write to General Electric Company, Appliance Park, Louisville 1, Kentucky.

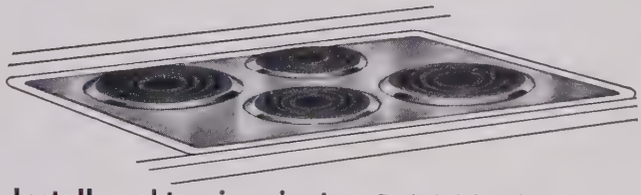
NO OTHER BUILT-IN RANGE HAS ALL THESE FEATURES

Easiest built-in ranges to install!

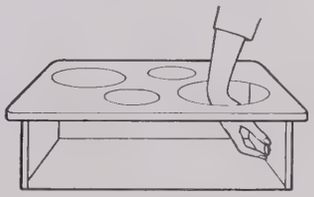
Oven installs easily with only one rough-in opening in a 27-inch cabinet or is made to fit (and made to match) General Electric Cabinets. Put oven at any height, practically anywhere in the kitchen. And you can build luxury sales appeal into your homes by installing a pair of General Electric built-in ovens, above each other or side by side.



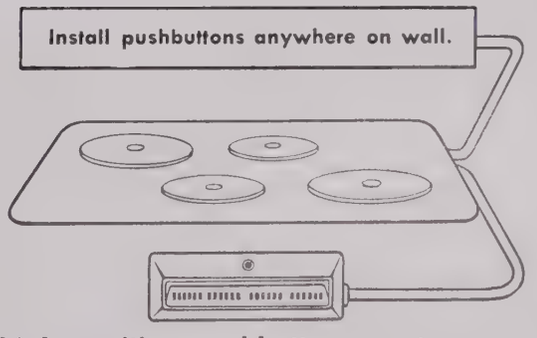
Same wide 21-inch oven as General Electric uses for all its ranges. Holds a huge meal. Lined with eye-catching "starlight" grey enamel. Calrod® bake units and "Focused Heat" broiler are enclosed. No old-fashioned open coils.



Install cooktop in minutes. Sealed-tight, sink-rims installation in a 36-inch base cabinet lets you mount cooking surface flush with countertop. The whole surface unit assembly drops neatly and quickly into place.



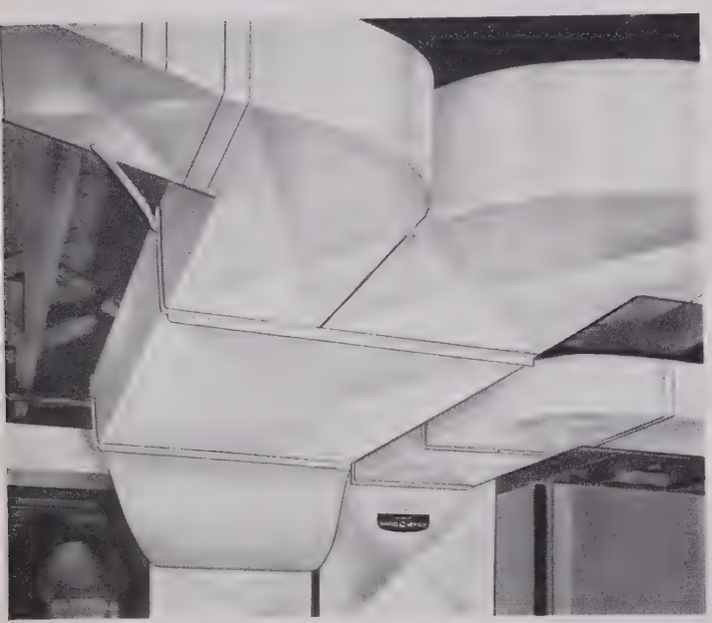
Simply reach through to fasten. Counter gripper thumb screws give easy, "stand up" installation —cut installing time in half.



Multiple-position pushbuttons can be mounted in front of cooktop cabinet, or in any back wall position. Switch box fits between studs on 16-inch centers. Special plug permits installation in the wall without disconnecting surface units.

GENERAL ELECTRIC

Air-Conditioning underlines the advantages of aluminum!





Aluminum contributes to the economy and efficiency of air-conditioning in two important ways: by improving insulation, and by eliminating possible damage from moisture condensation.

As a facing for bulk insulation, aluminum adds the TRIPLE PLUS*... **Plus #1,** up to 95% Radiant Heat Reflectivity; **Plus #2,** Best Moisture Vapor Barrier; **Plus #3,** Added Flame Resistance. Leading manufacturers of batts and blankets are now featuring this TRIPLE PLUS ...which Reynolds promotes in national consumer advertising.

For ductwork, the moisture condensation inevitable with air-conditioning makes rustproof aluminum essential. Its importance is emphasized in Reynolds consumer advertising. Builders can make a sales feature of it.

For these and all building materials made with Reynolds Aluminum—hardware, storm-screen windows, doors, thresholds, and other shapes—call your regular supply sources. For other product requirements, call the nearest Reynolds office listed under "Aluminum" in classified telephone directories. Or write to **Reynolds Metals Company,** General Sales Office, Louisville 1, Ky.

*Trademark

The Finest Products Made with Aluminum are made with REYNOLDS ALUMINUM

© REYNOLDS METALS COMPANY

For quick reference see Catalog 5a/Re in Sweet's Architectural File.

REYNOLDS ALUMINUM

See "FRONTIER", Reynolds great dramatic series, Sundays, NBC-TV Network.



PRACTICAL FLOOR of Atlas-White-Cement terrazzo adds beauty and distinction to home in Scarsdale, New York.

For durable floor beauty—terrazzo

This floor will give a lifetime of good looks, with less care and cost, because it's terrazzo.

More architects are discovering that terrazzo is as comfortable and easy to live with as it is attractive. *Smooth* terrazzo saves cleaning time and effort for busy housewives. *Rugged* terrazzo takes all kinds of hard use from children, or adults, and yet stays new-looking. Terrazzo floors need little or no maintenance . . . cut the owner's cost in the long run.

Architects like terrazzo's flexibility of design. So include terrazzo in your house planning. When you use Atlas White Cement in terrazzo, you have a wider range of color possibilities. Get better-looking terrazzo by specifying Atlas White Portland Cement, for its *quality-controlled* uniformity of color, performance, and permanence.

UNIVERSAL ATLAS CEMENT COMPANY

UNITED STATES STEEL (USS) CORPORATION SUBSIDIARY

100 PARK AVENUE, NEW YORK 17, N. Y.

Albany • Birmingham • Boston • Chicago • Dayton • Kansas City • Mil[illegible]
Minneapolis • New York • Philadelphia • Pitts[illegible] • St. L[illegible] • Wa[illegible]

Atlas® White Cement

FOR BEAUTY AND UTILITY • FOR TERRAZZO, PAINT, FACING, STUCCO

United States Steel Hour—Televised on alternate Wednesdays—See your local newspaper for time and stat[illegible]

NEW from WESTINGHOUSE

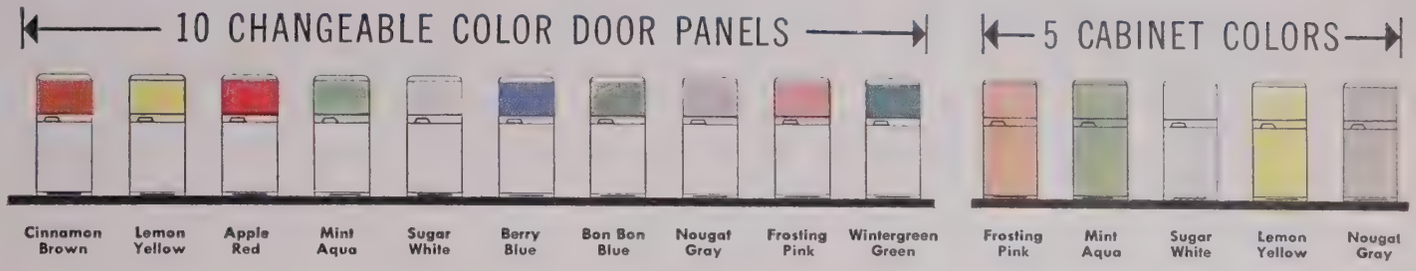


These beautiful new Westinghouse Refrigerators use color to put more sales appeal in your houses. Pick a cabinet in one of 5 new Confection Colors. Select the door panel from 10 Choose-N-Change Colors. Model DBJ-132 (illustrated) features *Automatic "Cycle" Defrosting* in its "Up-Top" food compartment. This 13.2 cu. ft. "Stoop-Saver" model has Freezer at bottom. Also available in Choose-N-Change Colors is model DFJ-122 which features *Frost-Free Completely Automatic Defrosting* in its across-the-top Freezer. 12.2 cu. ft. capacity.



NEW! BUILT-IN REFRIGERATOR FREEZERS—Westinghouse announces a Deluxe *Horizontal* Model, BHJ-13 (illustrated), and a Deluxe *Vertical* Model, BVJ-13, to add new built-in convenience to your kitchens. Both refrigerator-freezer models have approximately 13 cu. ft. total capacity. Advanced features include removable tilt-down "Showcase" Crisper in door, and *Automatic "Cycle" Defrosting* in Refrigerator. Both models are complete, self-contained units . . . are easy to install.

...Choose-N-Change Colors



50 color combinations to choose from! You know how prospective home buyers like to add their personal touch to kitchens. These Westinghouse Choose-N-Change Color Panels of Monsanto Vinyl let them do just that. Here are refrigerator color panels that can be changed quickly, easily and inexpensively.

...All types of Automatic Defrosting

Now you can let your customers choose the type of automatic defrosting they want in their refrigerator. Only Westinghouse offers a complete selection that includes these three types: Automatic "Cycle" Defrosting, Frost-Free* Completely Automatic Defrosting and Push-Button** Automatic Defrosting.



PUSH-BUTTON AUTOMATIC DEFROSTING. This 11.4 cu. ft. Westinghouse Refrigerator is one of 3 models with the new, patented Push-Button System. Just push the defrost button and frost is removed automatically. Defrost water drains into tray for easy disposal. Model PJ-114.

SPACE SAVING MODEL—This space saver has 8.0 cu. ft. capacity, is only 24" wide. Full-width Freezer and Cold Storage Tray hold 40 lbs. of frozen foods. Model HJ-80 (illustrated) is only one of a line of manual defrosting refrigerators in deluxe and standard models.



Westinghouse puts quality "sell" in your house with products years-ahead in design. Phone your Westinghouse Distributor today—or write our Contract Sales Department, Westinghouse Electric Corp., Major Appliance Division, Mansfield, Ohio.

* Trade Mark, U. S. Patents Issued: Nos. 2,459,173 and 2,324,309

** U. S. Patent Issued: No. 2,324,309

WATCH WESTINGHOUSE!

*WHERE **BIG** THINGS ARE HAPPENING FOR **YOU***

Fenestra sets the fashion in window beauty...

AWARD-WINNING PITTSBURGH COMMUNITY FEATURES FENESTRA COLOR-STYLED WINDOWS!

Garden City is a 1500-home development located in Monroeville, Pennsylvania, a suburb 15 miles east of Pittsburgh. The builders, Sampson-Miller Associated Cos., Pittsburgh, received an NAHB Award of Merit for their planning and merchandising of this outstanding new community. It is a prime example of how progressive builders give their buyers more than just a house on a street.

Under the direction of Jennings F. Stright, President, Community Planning Service Inc., Garden City is care-





Make the wiring plan a sales plan

In every woman's mind, a new home means new appliances. Your assurance that she can use these appliances, that you've supplied sufficient power for them, makes her more receptive. You can drive your sales point home with wire insulated with BAKELITE Brand Vinyl Plastic.

With this modern insulation, years of added service life result from inherent resistance to aging—resistance to cracking, stiffening and oxidizing. It retains electrical and mechanical properties longer. BAKELITE Vinyl Plastic is listed by UL for 60 deg. C. (140 deg. F) building wire and for non-metallic-sheathed cable—including the new all plastic types UF & NMC.

Your electrical contractor can install wire with insulation of BAKELITE Vinyl Plastic faster because it is smooth-surfaced, easier to pull through conduit. This thinner-walled insulation strips and splices fast, has no fabric covering. There's less weight than with other types.

Let this wiring plan help pull your sales through. Tell your electrical contractor to install wire insulated with BAKELITE Vinyl Plastic.

BAKELITE BRAND PLASTICS

Remember—everyone benefits from ADEQUATE WIRING insulated with BAKELITE Brand Vinyl Plastic

BAKELITE COMPANY, *A Division of Union Carbide and Carbon Corporation* UCC 30 East 42nd Street, New York 17, N. Y.

In Canada: Bakelite Company, Division of Union Carbide Canada Limited, Belleville, Ontario

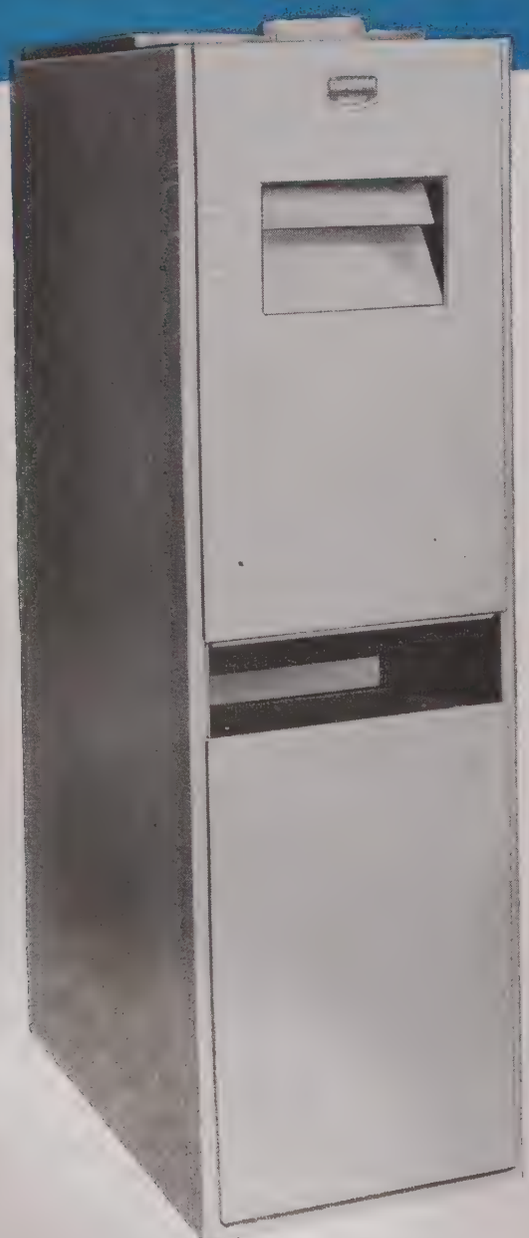
The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC

DESIGNED FOR BUILDERS . . .

the great new bryant



the new stars in Bryant's complete line of

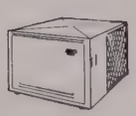


Here's good news! Two brand-new Bryant Gas Furnaces — downflow and upflow, each in three popular sizes — have just been introduced in time for homes being built right now. Loaded with Bryant features and carrying the famous Bryant brand name, they are low, low priced to help sell your homes faster . . . with a minimum investment. You'll be delighted at the rock-bottom cost of these handsome, dependable units. Ask your Bryant Distributor right now for a quotation!

. . . more stars in BRYANT'S complete line for builders of one to 1000 homes.



The famous Bryant "*Command-Aire*" MODEL 319 Gas Furnace.



Air-Cooled Summer Air Conditioner MODEL 560.



The compact, efficient Bryant Gas Boiler MODEL 26.



The MODEL 315 Oil Furnace for areas without gas.



The Water-Cooled Summer Air Conditioner MODEL 590.

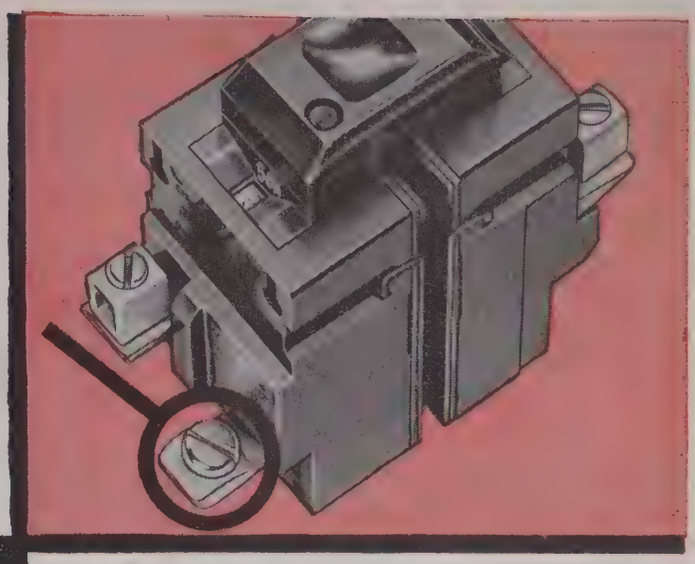


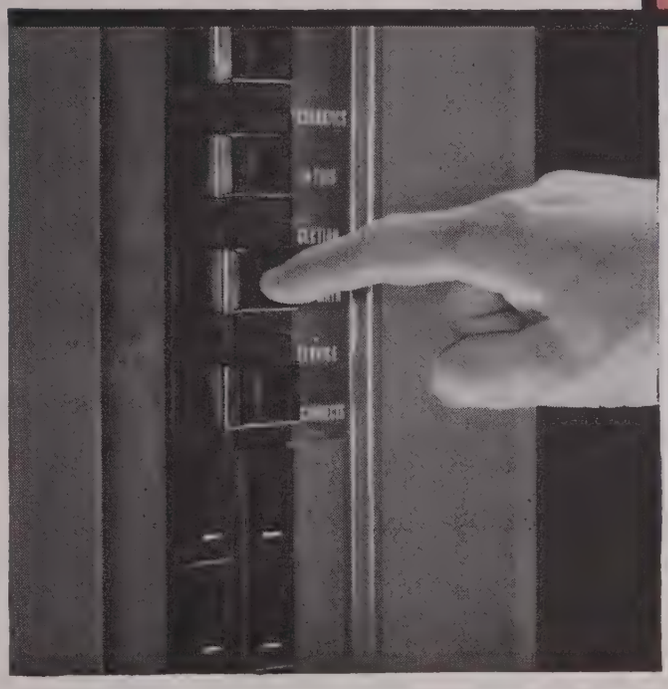
Bryant Water Heaters in prices and sizes for every home.

BRYANT *DOWNFLOW* SUBURBAN MODEL 384
Three sizes — 75,000, 100,000 and 125,000 Btu/hr. Built-in Draft Diverter, Bryant Diaphragm Valve and Pilot, Cast Iron Drilled Port Burners, "Straight-Through" Heat Exchanger, Built-in Side or Bottom Return.

bryant

THE BIG NEWS in circuit breakers is this BullDog Two-Pole, Common Trip Duo-Guard Pushmatic. Simplifies home wiring. Makes installation easier and faster. The new terminal screw retainer (circled) ends fumbling and wasted time . . . you get a *bolted* connection fast. Your buyers profit from push-button convenience and dual circuit protection.





New Two-Pole "Common Trip" Duo-Guard Pushmatics

The heavy-duty, safe, positive switching and protective device

There's real convenience, real safety in two-pole breakers now. BullDog's new Duo-Guard Pushmatic® Common Trip breakers for Electri-Centers® are now available for two-pole, 220V circuits (15 to 50 amperes)—for residential, commercial, institutional and industrial applications.

Operation of this new two-pole Common Trip Pushmatic is simple and safe. (1) A push of the button gives simultaneous "ON" or "OFF" operation. (2) In the event of an overload or short circuit, both poles are automatically de-energized.

Of course, Duo-Guard protection is built into each Common Trip, too, just as it is into single-pole Pushmatics—your assurance of automatic, two-way protection *in any circuit.*

Ask for a demonstration of the new Common Trip now. See your qualified electrical contractor, BullDog field engineer or write BullDog Electric Products Company, Detroit 32, Mich.

©BEPCO

IF IT'S NEW . . . IF IT'S DIFFERENT . . . IF IT'S BETTER . . . IT'S

BULLDOG

ELECTRIC PRODUCTS COMPANY

A Division of I-T-E Circuit Breaker Company

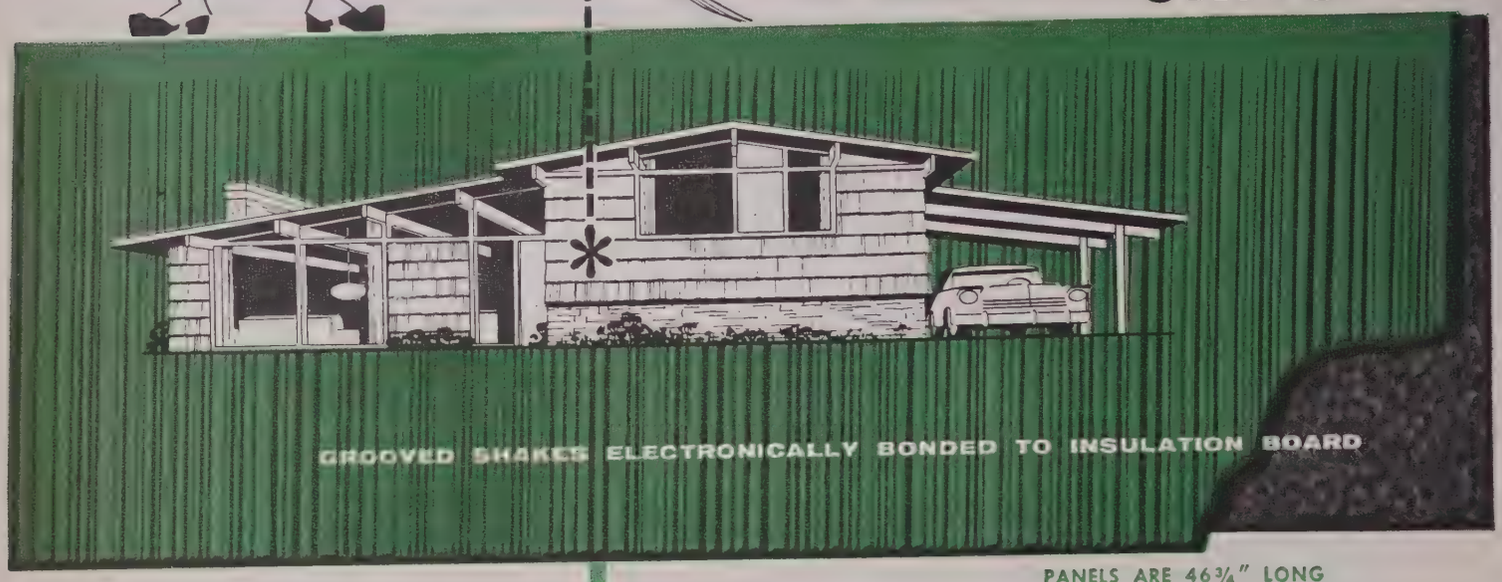
Export Division: 13 East 40th Street, New York 16, N. Y. • *In Canada:* BullDog Electric Products Co. (Canada) Ltd., 80 Clayson Road, Toronto 15, Ont.



FOR GREATER ECONOMY FEATURE THE NEW

Shakertown GLUMAC UNITS

U. S. PATENT 2,232,766. OTHER U.S. AND FOREIGN PATENTS PENDING.



PANELS ARE 46¾" LONG

OPERATION 56 the year to FIX HOME IMPROVEMENT

HOME IMPROVEMENT IS EASIER WITH— GLUMAC UNITS

- Quick to Apply
- Adds Color plus Insulation
- Only a Hammer and Saw Required
- Increases Value of Home

Shakertown®

FIRST NAME IN CEDAR SHAKES

SAVES 70% IN APPLICATION TIME

GLUMAC Units are a full 46¾" long for fast application, yet are light and easy to handle... go on in a hurry for maximum economy. Factory-stained... no additional stain-coat needed. Nothing *sells* a home like sidewalls of *real wood shakes.* Build homes faster... sell homes faster... with Shakertown GLUMAC Units!

SELECTED CEDAR — FACTORY STAINED IN A CHOICE OF 12 ARCHITECT COLORS

Use Shakertown's wide range of rich, beautiful colors for complete sidewalls or in combination with other materials. GLUMAC Units are packaged with matching color annular threaded nails. Matching color "jiffy corners" are available, too.

NATIONALLY ADVERTISED TO HOME OWNERS

WRITE TODAY FOR GLUMAC FACTS

THE PERMA PRODUCTS COMPANY
20310 Kinsman Road · Cleveland 22, Ohio

Please send full information about GLUMAC Units.

NAME OF FIRM.....

ADDRESS.....

CITY.....ZONE.....STATE.....

SIGNATURE.....

ALL-NEW, ALL-PURPOSE COPY MAKER...

the *right way* to copy anything *



The Brand New

APĒCO DIAL-A-MATIC Auto-Stat

Now get copies of anything written, printed, typed, drawn, photographed or blueprinted. All copies made the same easy way, right in your own office.

Simplest copy control ever . . . it's the *DIAL THAT DOES IT*

It is the one copy maker that fulfills all copy requirements for all businesses, large or small. It offers hundreds of money and time saving uses and is so low cost it pays for itself in less than a year . . . even when less than 5 copies a day are needed. It's light weight . . . compact, and styled in gleaming mirror-finish stainless steel.

Styled by
Charles E. Jones & Associates

It Copies Anything

EXCLUSIVE JOB-PERFORMANCE GUARANTEE

The APECO Dial-A-Matic Auto-Stat is guaranteed *in writing* to copy any originals on which your purchase decision is based.

*And Here's Why it's RIGHT

It's Right Because it's All-Purpose . . . It copies anything without limitations!
It's Right Because it's Fast . . . . . Copies are ready in less than 30 seconds!
It's Right Because it's Economical . . . . . Copies cost less than a phone call!
It's Right Because it's Error Proof . . Copies are photo-exact . . . legally acceptable!
It's Right Because it's Confidential . . . Copies are made right in your own office!



Have you read this NEW BOOKLET?
Mail this air mail postage paid card for your FREE BOOK

American Photocopy Equipment Co.
1920 W. Peterson Avenue
Chicago 26, Ill.

(Dept. HH-66)

Rush me, without obligation, your free booklet on new Apeco Dial-A-Matic Auto-Stat copying. I understand this factual report will show me how I can improve the efficiency of my business as well as increase work output.

Name_____

Title_____

Firm_____

Address_____

City_____ Zone____ State_____

In Canada: Apeco of Canada, Ltd.
134 Park Lawn Rd., Toronto, Ont.



THIS CARD TEARS OUT
use it to get your FREE BOOK

AMERICAN PHOTOCOPY EQUIPMENT CO.
Chicago 26, Ill.



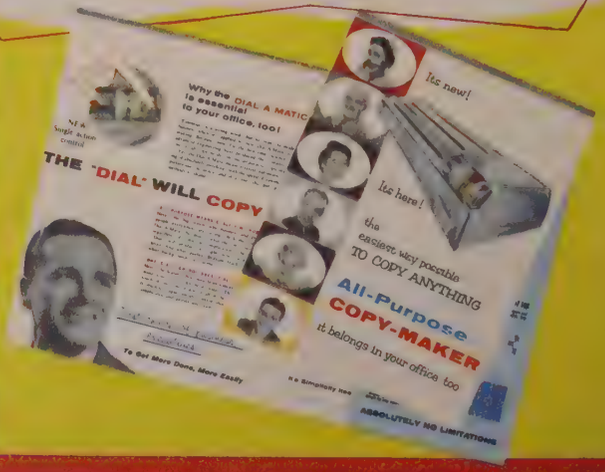
all-purpose copy maker

There isn't an office form or record used by businesses —large or small—that can stump this versatile new copy maker. Hard to believe? Well...it's true! Thousands of business executives now using the Apeco Dial-A-Matic Auto-Stat know:

"IT'S THE RIGHT WAY TO COPY ANYTHING."

Now...new FREE BOOKLET tells you how!

Your free copy of this new booklet pictures and describes the revolutionary, new APECO Dial-a-matic Auto-Stat; tells how this new copying method can be used in your business to cut office paper work, save time, labor, and money. This informative, factual report should be *must* reading for you, as well as every executive member of your staff. Send for your free booklet today!



FIRST CLASS
Permit No. 26670
(Sec. 34.9 P.L. & R.)
Chicago 26, Ill.

Via Air Mail

BUSINESS REPLY CARD
No postage stamp necessary if mailed in the United States

5c—Postage will be paid by—

AMERICAN PHOTOCOPY EQUIPMENT CO.

1920 W. Peterson Ave.
Chicago 26, Ill.

TEAR-OUT POSTAGE PAID AIR MAIL CARD!

SEND FOR YOUR FREE BOOKLET TODAY!

Take a minute before you fill out this coupon!

Take a minute to consider what *you* expect from a prefabricated home manufacturer.

If it's merely the delivery to your site of a well-designed house package at the right price, we certainly welcome your inquiry.

We at Heritage Homes believe, however, that our role is far more than that. We stand ready to serve you as a close business partner, on the sound basis that "business is service". As a result, we offer a rather unusual combination of services in company with our basic house package.

Our parent organization is the Peter Kuntz Company, which operates more than fifty lumberyards throughout the Midwest. An affiliate is the North Central Mortgage Acceptance Corporation.

You will find that your problems receive individual attention... your requirements quick, personal service. It is our firm purpose to work closely with our builder-dealers, counseling on cost-cutting construction methods, creating promotions for each project. Our success *must* be based on your success.

This partnership concept can mean a progressive step-up in starts and sales. Dealerships for Heritage Homes builders are available, particularly within our five-state delivery area. Fill out the coupon now to learn more about this truly rare business opportunity.

HERITAGE PRE-CRAFT HOMES
19622 Nottingham Rd., Cleveland 10, O.

Tell me more about Heritage Homes.

Name_____

Street_____

City_____ State_____

I am a builder ☐ real estate man ☐ other ☐

An exciting new concept in marketing new homes

- Prospect-pleasing architect designs
- Practical color planning
- Mortgage financing service, FHA-VA
- Field engineering service
- Acceptable to mortgage loan officials
- Optional appointment items
- Effective advertising and promotions

Plus a basically improved method of home construction, featuring modular units with mortised framing, tongue-and-groove panels, windows installed in their panels, complete interior door assemblies, factory-engineered roof trusses..and proved economies in erector's costs.

Heritage
PRE-CRAFT
Homes

A product of
THE INDEPENDENT LUMBER COMPANY
19622 Nottingham Rd., Cleveland 10, O.





TRIM A DOORWAY IN JUST 4 MINUTES with USG® Snap-on Metal Trim. Saves up to 50% in labor time, up to $1.70 per opening in materials cost. No special tools required, no nail holes to fill. Side trim comes ready-mitered; head trim requires only rough mitering. Snaps in place easily—and it's bonderized, easily painted.



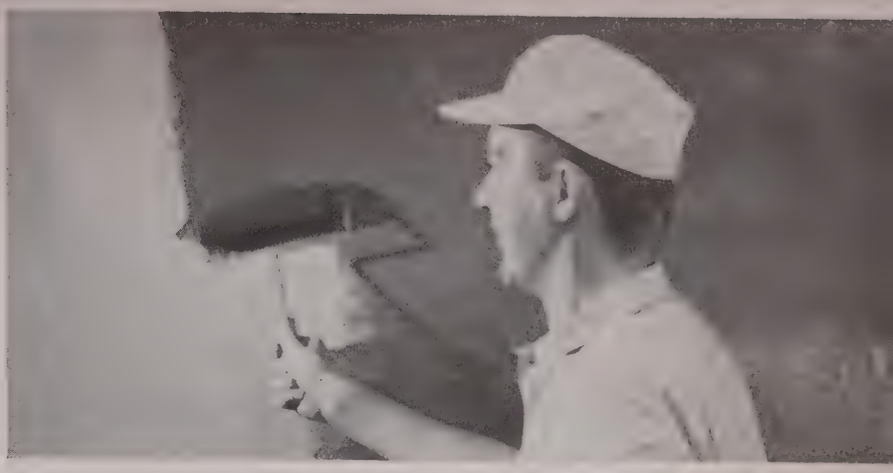
REINFORCE CORNERS FASTER with DUR-A-BEAD* Metal Corner Reinforcement. It nails on outside corners, combines maximum protection with ease and speed of application. Provides true, impact-resistant corners; requires only a minimum amount of cement.



MACHINE-FINISH JOINTS AT THE RATE OF 3 MPH! Joints can now be taped at a workman's walking pace, thanks to new joint reinforcement and finishing tools. Taping machine automatically applies PERF-A-TAPE* reinforcement and PERF-A-TAPE Cement to the joint (cement is fed by battery powered



pump). Finishing tool (above) flushes the joint with cement after taping. Finishing tools carry their own supply of PERF-A-TAPE Cement; are available in different widths that feather edges automatically.



NEW ONE-COAT TEXTURE PAINT. Just one coat of TEXOLITE* Texture sand finish latex paint beautifully conceals minor surface imperfections and taped wallboard joints. No priming required. Flows on freely, leaves *no* "painty" odor, and it's washable. In 17 ready-mixed colors and white.

SALES BUILDERS FOR HOME BUILDERS

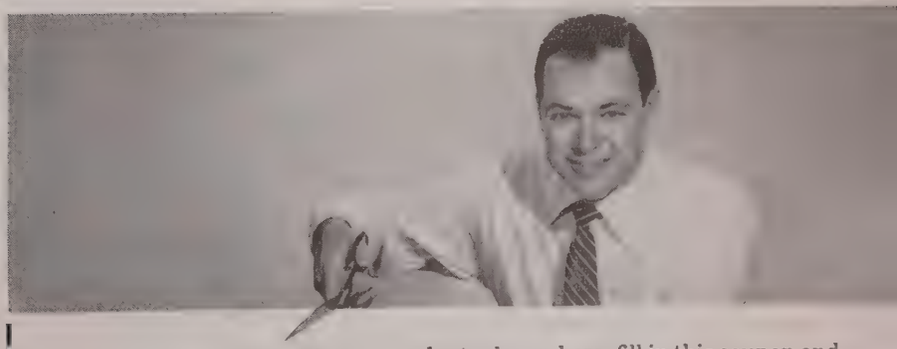
Gypsum wallboard finishing system—available from your U.S.G. building materials dealer—speeds construction of quality walls and ceilings

Your work is faster and easier when you deal with the builder's most dependable manufacturer—United States Gypsum. Your sales are made more quickly when your interiors have the smoothness, the uniformity, the beauty that say "superior quality" . . . United States Gypsum quality!

*T. M. Reg. U.S. Pat. Off.

UNITED STATES GYPSUM BUILDING PRODUCTS

the greatest name in building



For complete information on products shown here, fill in this coupon and mail to United States Gypsum, Dept. HH-61, 300 West Adams Street, Chicago 6, Illinois.

☐ USG Snap-on Trim ☐ New drywall joint finishing tools
☐ TEXOLITE Texture Paint ☐ DUR-A-BEAD Metal Corner Reinforcement
☐ PERF-A-TAPE Joint Finishing System

NAME_____
(Please print)

FIRM_____

ADDRESS_____

CITY_____ STATE

What's the secret behind the home that "sells like crazy"?

Better living—today's most important buying motive.

Why is it some new homes move slowly while others with fairly high cash requirements "sell like crazy"? The difference is often "better-living" extras. People today want to live better, and to most people this means live better electrically.

Housewives and mothers are convinced that a work-saving, time-saving electric kitchen is worth every penny it costs. Where weather is a problem, electric air conditioning becomes a "must," not a luxury, in a better-living home.

They've been reading mouth-watering advertisements for years, selling themselves on electric dishwashers, clothes washers, dryers,



National Magazine Campaign. Beginning in April, millions of prospects have been reading colorful "spectaculars" in Life, Saturday Evening Post, Look and leading women's service and shelter magazines. Big ads like these sell Live Better Electrically in a dramatic, convincing and memorable manner.

indirect lighting, remote-control wiring, all the wonderful, comfortable features that only electricity makes possible. They want them *now* in the house they are willing to buy.

Living better electrically — that's the key to buying appeal. It's a *feature* that smart builders include and promote in the homes they offer. It's a *feature* that prospects look for and when they find it — they buy!

Offer better living . . . electrically and you'll *sell* more houses!

A national advertising and publicity campaign will be working for you year in and year out to promote the theme "Live better



National TV Campaign. Every month over 30 million people will see and hear the Live Better Electrically story on the full CBS network. Electric utilities throughout the country will broadcast the same message on local television and radio.

. . . electrically." When you identify your homes with this campaign, you're on the way to closing a sale. Build better electrical living into your homes. Tell about the modern electrical features, the up-to-date wiring in your homes, and they'll "sell like crazy." That's the secret.

Send now for the 72-page full-color book "New Step-by-Step Ideas to Help You Live Better Electrically" — the same book your prospects will be reading. For your copy call or write your local electric utility, or write Live Better Electrically, P. O. Box 505, Great Neck, L. I., New York, enclosing 10 cents to cover the cost of handling.



Billboards. All over the country electric utilities will be displaying this "Live Better Electrically" message where your prospects will see it. They'll see it when they're on the road, looking for that "better-living" home!



Display the LIVE BETTER . . . *Electrically* symbol at all your homes. You'll appeal to your prospects' desire for better living.



How to "Comfort-Condition"

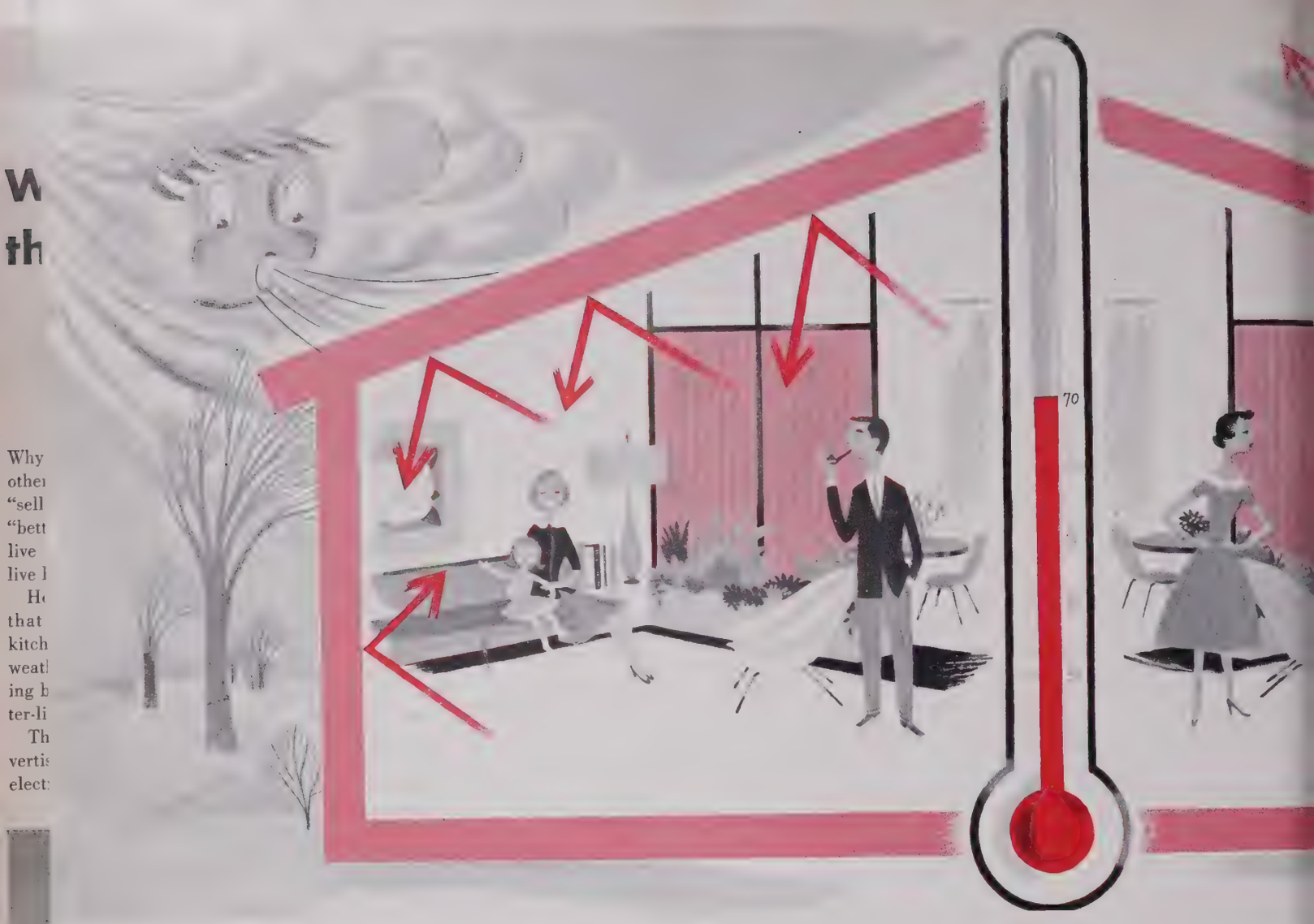
the OPEN PLAN HOME

for greatest heating efficiency in winter... coolest living in summer!

With its outstanding physical advantages, the open plan home represents one of the most important trends in modern residential design. It adds a new, sweeping spaciousness . . . makes even limited areas seem roomier and more extensive. By borrowing space from *outside*, it adds extra liveability *inside!*

But there are objections to the open plan home—especially when it comes to heating and cooling. To assure winter warmth and summer coolness, special design principles must be closely observed. If these precautions are followed, the open plan home can be heated and cooled efficiently and economically.

In fact, in Minnesota—where the outside winter temperature skids to 20° below—one builder is heating his 1,250-sq. ft. open plan homes for as little as $84 a winter! And in 10 cities across the country, Owens-Corning Fiberglas* is now conducting tests to prove that the average home, if adequately insulated, can be heated and cooled all year round for $



SUMMER DESIGN also solves the winter problem

—— if the Open Plan Home is insulated with . . .

Winter or summer, the job of insulation is the same . . . *to prevent excessive heat flow through walls and ceilings!* Actually, the load caused by air temperature differences is approximately the same, winter or summer. But since sun heat load of roofs is an added consideration in summer—and since the cost of *cooling* exceeds the cost of *heating*—the summer problem ranks most critical. Therefore, proper design omfort will assure maximum winter pro

The winter heat problem varies geographically. But strangely enough, the summer hea the same *everywhere*. Based on U. S records for July, the average daily a flat surface is about the same in s Alabama and Louisiana, as it is in n Maine, Minnesota and Washington! F location, a 1,000-sq. ft. roof is expos almost 2 million B.T.U.'s daily. To offset this p on the design of open plan homes, consider t

START WITH THE ROOF:

In summer, sun load is worse on roofs than on any other part of the home. In winter, roofs account for up to 25% of the heat loss.

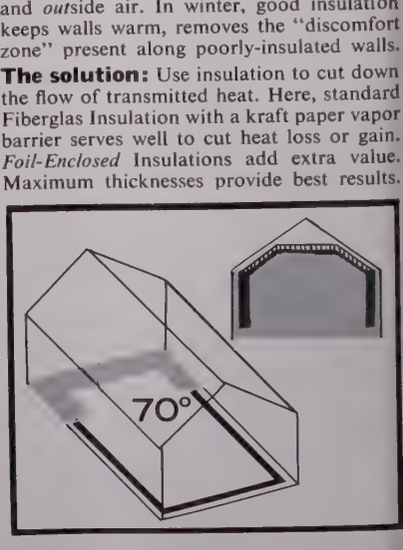
The solution: Good design; good ventilation; and *maximum insulation!* Heat-flow tests show the best year-round performance is with adequate thicknesses of insulation combining aluminum foil, to reflect radiated heat, with a mass material like Fiberglas, to reduce heat flow. Specially recommended: new Fiberglas *Foil-Enclosed* Insulation to reduce heat *gain* in summer and heat *loss* in winter to a minimum. Ventilation of attic spaces removes heat, improves performance.



THE WALLS:

In open plan homes, where large proportions of wall areas are glass, the solid walls *must* be insulated with great care. While walls receive less sun heat than the roof, there is still a 15° to 20° temperature difference between *in*side and *out*side air. In winter, good insulation keeps walls warm, removes the "discomfort zone" present along poorly-insulated walls.

The solution: Use insulation to cut down the flow of transmitted heat. Here, standard Fiberglas Insulation with a kraft paper vapor barrier serves well to cut heat loss or gain. *Foil-Enclosed* Insulations add extra value. Maximum thicknesses provide best results.





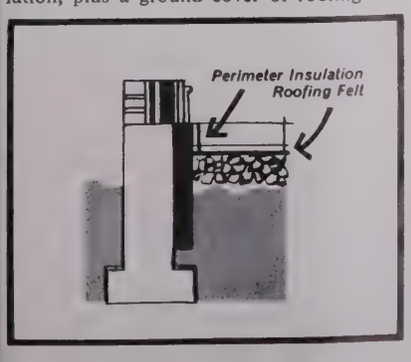
OWENS-CORNING

FIBERGLAS

TM REG U S PAT OFF

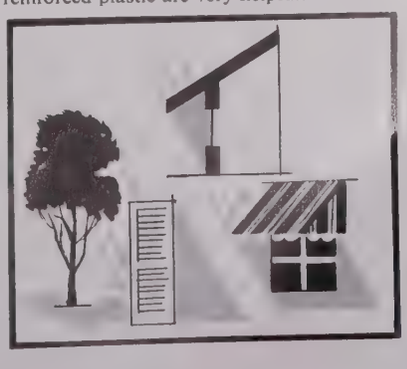
THE FLOOR PROBLEM:
In summer, heat gain poses a problem where ducts run in slabs. In winter, uninsulated slabs lose heat from the edge. Such slabs are cold and uncomfortable and may cause moisture to condense and stain floors, start rotting or loosen floor-covering adhesives.

The solution: In slab homes, an effective perimeter insulation such as Fiberglas Perimeter Insulation is vital (National Warm Air Heating and Air Conditioning Association lists such insulation as *essential* if air conditioning ducts are part of the slab.) Crawl space walls call for Fiberglas Perimeter Insulation, plus a ground cover of roofing felt.



WINDOWS ARE TROUBLE SPOTS:
Glass admits sun and air heat—and winter cold—many times faster than even uninsulated walls. Thus the problem becomes critical in open plan homes with extended glass areas.

The solution: Double-glass, insulating glass, or storm windows cut heat transfer as much as 50%. Whenever picture windows are used, specify beautiful, translucent Fiberglas draperies to reflect radiated sun heat! Orientation of large windows away from the south and west helps keep off sun heat. Artificial exterior overhangs or awnings of Fiberglas-reinforced plastic are very helpful.



How Insulation Serves in Comfort Conditioning



SAVES MONEY ON EQUIPMENT! Insulation saves money immediately by reducing the cost of the heating and cooling plant. With B.T.U. heat loss or gain reduced, unit sized pipes, ducts and other equipment can be cut down. Reduction in unit size can save up to three times the cost of insulation. Maximum insulation helps bring insulation first cost within the range of more buyers.



SAVE UP TO 58% OPERATING COSTS! By insulating with maximum thicknesses of Fiberglas Insulation, up to 58% can be saved on air conditioning operating costs! Smaller units cost less to operate and run for shorter lengths of time. And the savings in *winter heating* costs further help return the insulation cost to the owner.



IT'S LIKE GETTING A ¾-TON AIR CONDITIONER FREE! Insulating the open plan home with maximum thicknesses of Fiberglas Insulation instead of minimum thicknesses will keep out as much sweltering summer heat as a ¾-ton air conditioner can remove! Even without air conditioning, this brings comfort. And with maximum insulation, air conditioning can be added later at lowest cost.

Fiberglas Design Portfolio

OPEN PLAN HOMES

REMEMBER THESE MATERIALS...

...for extra comfort, beauty and economy in OPEN PLAN HOMES



Fiberglas Draperies do more to meet the demands of modern living in open plan homes than any other fabrics. They are the most care-free decorative fabrics on the market . . . completely washable, never need ironing, can't shrink, stretch. Absolutely fire-safe, too!



Fiberglas Screening—the fabulous new screening that's rust-proof, bulge-proof, fire-safe, won't stain, never needs painting. Specify it for patios, porches, Bermuda houses, and in screens for the prime or combination windows for the homes you design.



Fiberglas-Reinforced Paneling . . . colorful and translucent . . . lets you select the light transmission you require! Extra-strong, but extra easy to use. Recommended for room dividers, partitions, wall panels, roofs, patio coverings, wind breaks and awnings.



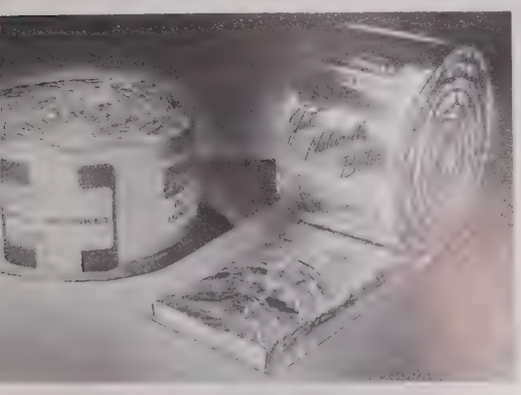
Fiberglas Duct Insulation (1) prevents excessive heat gain in ducts; (2) silences the sound of air movement; (3) prevents condensation on cool ducts. Fiberglas makes a complete line of duct insulations—rigid or flexible, faced, sprayed, or uncoated.



Fiberglas Dust-Stop* Air Filters are key factors in assuring comfort and cleanliness in forced air conditioners. Dust-Stops are extra efficient because they trap dust, dirt and pollen *all through the filter* . . . not just on the surface.



Fiberglas Acoustical Tile keeps the home quiet, peaceful, restful. Absorbs up to 80% of unwanted noise. Comes in a variety of patterns and colors that match any decorative treatment. Economical, easy-to-install Fiberglas Acoustical Tile is fire-safe, dimensionally stable.



Fiberglas Insulations—in a variety of forms—every insulation need:

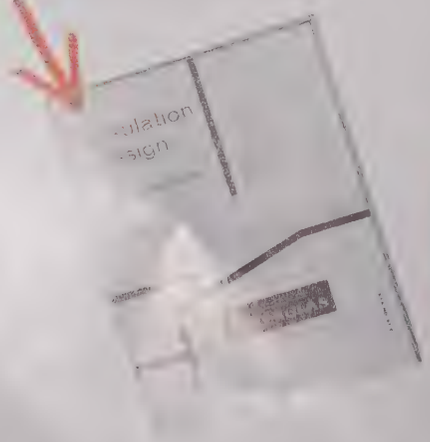
Foil-Enclosed batts and blankets—for maximum year-round performance in ceilings. (2" and 3" thickness)

Standard batts and blankets—for walls and areas where foil-enclosed insulation is not required. (1½", 2" and 3" thickness).

Perimeter insulation—cuts heat loss, keeps slab floors warm, dry, comfortable.

FREE BOOKLET:

"Insulation design for the air-conditioned home"



This outstandingly helpful booklet covers the design problems of air-conditioned homes. Specially written with charts, diagrams and other valuable information.

To quote *House & Home:* Building professionals should obtain a copy of this booklet "the quicker the better if you have an air-conditioned house on your drawing board."

For your free copy, send your name and address to Owens-Corning Fiberglas Corporation, Dept. 67-F, Toledo 1, Ohio.

OWENS-CORNING

FIBERGLAS

*T-M. (Reg. U. S. Pat. Off.) O-C.F. Corp.

Now . . . over 8,000,000 REZO door installations

backed by 103 years of woodworking craftsmanship!

THE PAINE

REZO®

air-vented, all-wood grid core

FLUSH DOOR

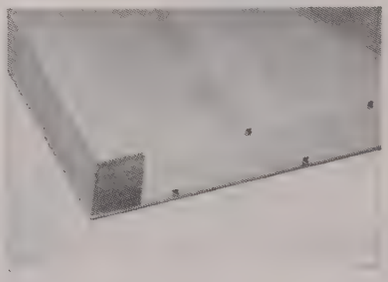
is by any standard of comparison

America's Finest

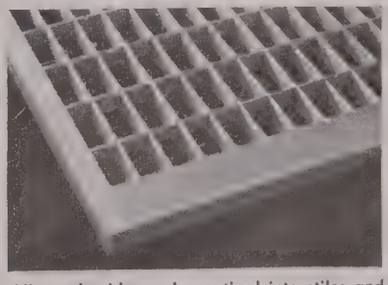
Thousands of architects, builders and dealers know — from long experience — flush doors may look alike but none can equal a Paine REZO Door for beauty; strength, all-climate stability, trouble-free service. Made to standards which far exceed CS 200-55, a Paine REZO Door is backed by 103 years of millwork experience and over 8,000,000 successful installations the world over. A REZO Door is, by any standard of comparison, America's Finest flush door!



A standard 2-6 x 6-8 door weighs only 30 lbs. It's easy for one man to install a REZO door.



Fully ventilated, all-wood, grid core allows rapid stabilization of moisture content throughout the door in any climate.



All-wood grid core is mortised into stiles and rails for added strength and durability unobtainable with an implanted or floating core. Stiles are 1⅜" instead of the 1⅛" minimum required by the new standard CS 200-55.



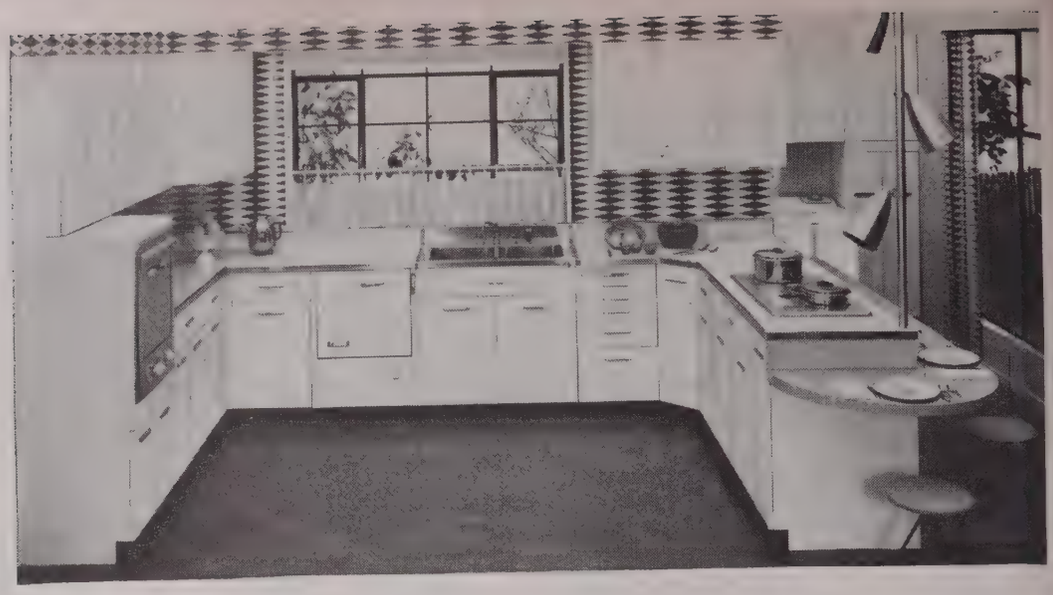
Available in all standard sizes or custom-made to fit your needs.

Write for descriptive literature today.

PAINE

LUMBER COMPANY, LTD.

ESTABLISHED 1853 • OSHKOSH, WIS.





This is for me!

A REPUBLIC STEEL KITCHEN IN COLOR!

AT NO EXTRA COST TO BUILDERS

Kitchens sell homes—and it costs not one penny more for you to dramatically create a Republic Steel Kitchen in Prelude Pink, Tempo Turquoise, or Largo Yellow . . . the lovely new Harmony Hues. Soft, subtle shades that folks buy without question—without request for change—because they're styled to answer modern kitchen decor. Harmony Hues blend with new-trend appliances in color, and go so well with today's fashionable decorating materials.

REPUBLIC STEEL MEANS SERVICE, ECONOMY

Republic Steel, the only company in the industry offering the economy of "mine to market" production, provides distinct advantages to builders. Dependable service, Planning guidance. Economical installation. Quality that eliminates expensive call-backs. Get the complete story from your Republic Steel Kitchens distributor, or use the coupon.

REPUBLIC STEEL KITCHENS

in Harmony Hues

IN CLASSIC WHITE • LARGO YELLOW
TEMPO TURQUOISE • PRELUDE PINK

REPUBLIC STEEL KITCHENS • Builder Sales
1038 Belden Avenue • Canton 5, Ohio

Send me complete information on Republic Steel Kitchens and the name of my nearest distributor.

Firm_____

Individual_____

Address_____

City_____ Zone_____

County_____ State_____

HH-366 C-1326

From crate to operation ...in just ONE HOUR!*



*By actual installation case history.

New Servel "Sun Valley" 3-ton All-Year® air conditioner both heats and cools with a single system!

One . . . is the magical number that makes this new Servel unit your best air conditioning bet. Just look at these advantages!

The whole unit comes in *one crate* . . . eliminates losing parts in shipment. Speeds uncrating, too. Just put the packaged unit in place.

One hour . . . that's all it takes to uncrate this air conditioner, hook up ducts, vent and utilities . . . and turn it on.

One system . . . the same coil cools the air in summer that heats the air in winter with no moving parts—nothing to wear out. All other air conditioning uses two systems, even when packed in the same "skin". And the new Servel model heats and cools with *one* fuel. No expensive 3-phase current is needed.

Add these advantages together . . . plus compact, space-saving design (only 10.4 square feet) . . . and you can save hundreds of dollars on each installation. Mail coupon for complete information.

Servel

the name to watch for great advances in

AIR CONDITIONING ✓ REFRIGERATION

ONE sure way to more profits with Servel All-Year Air Conditioner

ONE CRATE — Because this new model is a single system, it is shipped in just one crate.

ONE FUEL — Amazing new unit heats and cools with gas . . . there are no moving parts to wear out.

ONE SYSTEM — Revolutionary single-system design greatly simplifies installation . . . cuts service problems.

SERVEL, INC., Dept. HH66
Evansville 20, Indiana

Please send me complete information on the revolutionary new 3-ton "Sun Valley" air conditioner.

Name_____

Address_____

City_____ Zone_____

County_____ State_____

Do your rooms look as large as they could?

Costs you no more to offer much more usable space—with MODERNFOLD DOORS

First impressions influence home-buyers. They like the spaciousness of rooms with MODERNFOLD Doors. No doubt about it, you can make your homes more desirable with these space-saving doors. Their lifetime quality is pre-sold by outstanding national advertising. What about the cost? Actually it's no more in the long run. With MODERNFOLDS you save substantially on installation labor ...and there's *no* finishing or hardware expense. In beautiful decorator colors and wood-grain finishes, MODERNFOLD Doors are completely equipped; ready for quick, simple installation. You really should have all the details. Call a MODERNFOLD Distributor, or mail the coupon today.



Plenty of room for appliances, for moving around comfortably, for extra cupboard space with MODERNFOLDS.

AND WITH MODERNFOLD—YOUR HOUSES CAN FEATURE NATIONALLY ADVERTISED BASEMENTS!

MODERNFOLD national ads in American Home, Better Homes and Gardens, Living for Young Homemakers, House Beautiful and Sunset illustrate this basement.



MODERNFOLD dividing wall closes off workshop from recreation room...extra storage space is provided by a MODERNFOLD floor-to-ceiling closet opening.

modernfold®
DOORS

New Castle Products, Inc. Dept. F20, New Castle, Indiana

Please send complete information on MODERNFOLD Doors.

NAME _____

ADDRESS _____

CITY _____ ZONE ____ STATE _____

In Canada, address New Castle Products, Ltd., Montreal 6. In Germany, New Castle Products, GMBH, Stuttgart.

© 1956, NEW CASTLE PRODUCTS, INC.





CARLTON Stainless Steel Sinks add *that luxurious custom look*

without a penny's extra cost!



CARLTON SINKS HAVE STILL OTHER ADVANTAGES

Don't forget to tell your prospects about Carlton's straight side walls that hold up to a gallon more water; how the narrow center wall reduces splash from a swinging faucet; how the Carlton's special rubberized undercoating hushes dish clatter and reduces garbage disposer noise to a gentle purr.

The selection of the right sink for a new or remodelled Kitchen is often the difference between making and losing the sale. That's why Carlton Stainless Steel Sinks are in such demand. Costing not a penny more than most ordinary cast iron sinks, they offer housewives *extra exclusive advantages.* Such features as Carlton's exclusive sparkle finish that actually *improves* with use; no surface enamel or plating that can chip or crack; no chance of rust or stain. Keeping a Carlton Stainless Steel Sink spotlessly clean is as easy as washing a glass! . . . And there are savings for you, too, in Carlton's lesser weight (the double sink bowl shown above weighs only 17 pounds!) which makes quick installation easy.

Write today for Catalog OO and the name of our nearest distributor. Carrollton Manufacturing Company (Sink Division), Carrollton, Ohio.

The bright spot in your kitchen

CARLTON
STAINLESS STEEL
SINKS

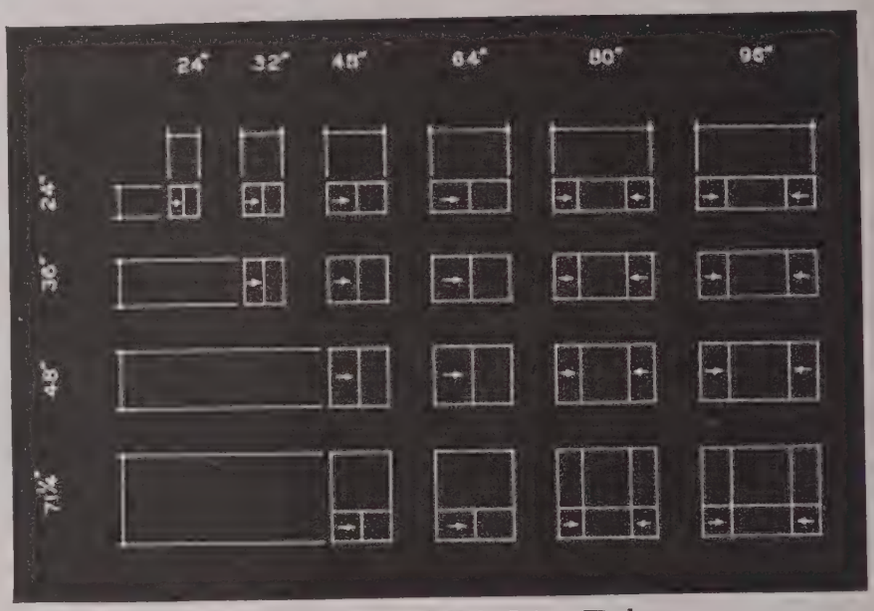
NOW...RUSCO ALUMINUM PRIME WINDOWS MEET STANDARDIZATION for window openings recommended by HOUSE & HOME ROUND TABLE

Drawings indicated at right illustrate the complete schedule of sizes available. Fixed-lite, horizontal and vertical slide units may be combined in a wide variety of window designs.

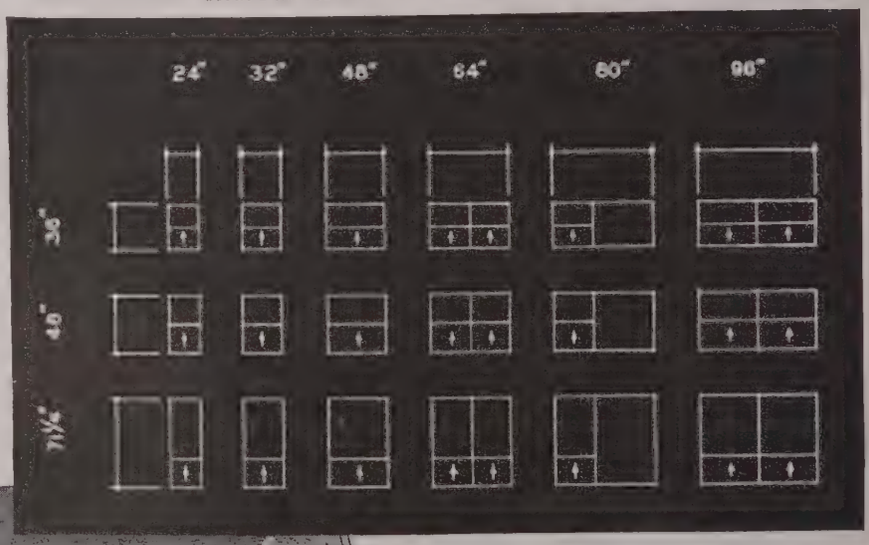
New "Redi-Fin" construction saves time

—Rusco "Redi-Fin" aluminum prime windows are complete units, with exterior casing and nailing fins an integral part of the window frame. Can be installed in minutes. Windows are completely glazed, screened, and have all hardware attached. Movable panels slide on felt, never stick or rattle, and can be removed from the inside for easy cleaning. Built-in felt weatherstripping gives complete weathertightness.

Rusco Redi-Trim Interior Casings are optional, and are designed for installation after the application of the finished plaster or dry-wall is applied.



"Redi-Fin" Horizontal Slide Prime Windows



"Redi-Fin" Vertical Slide Prime Windows

Already proved in use!

These new Rusco Windows are now in use in many housing developments. Rusco "Redi-Fin" Windows reduce costs and make new homes easier to sell! Write for free catalog.



Builder—Zane Construction Co., Cleveland, Ohio

RUSCO
WINDOWS and DOORS

The F. C. RUSSELL COMPANY

Dept. 7-HH-66, Cleveland 1, Ohio • In Canada: Toronto 13, Canada



RUBEROID

Color Grained AUTOCLAVED SIDING

ASPHALT AND ASBESTOS BUILDING MATERIALS

For more information, write The RUBEROID Co., 500 Fifth Avenue, New York 36, N. Y

NOW...

a Fall-Winter edition of House & Garden's Book of Building

Due to its tremendous popularity H&G's Book of Building is now published twice a year —(Spring-Summer and Fall-Winter) two complete editions both timed for the seasons when interest in building is at its peak.

The Fall-Winter edition of H&G's Book of Building offers you another opportunity to reach and sell the tens of thousands of families who are vitally interested in new home building or remodeling.

Many of the nation's leading building materials and equipment manufacturers have already scheduled the Fall-Winter edition.

Plan to capitalize on it too—the first big ideaful Fall-Winter edition of H&G's Book of Building.

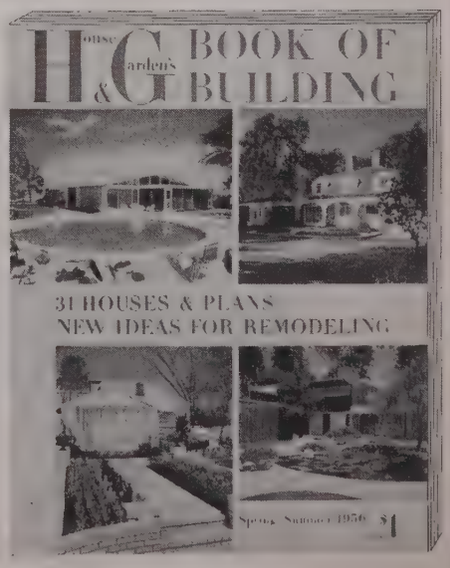
Reserve your space in the 1956 Fall-Winter Edition now!

CLOSING DATES: 4-color: June 15, 1956
2-color: July 6, 1956
black & white: July 6, 1956

ON SALE: September 1, 1956

House & Garden

a Condé Nast Publication,
420 Lexington Avenue
New York 17, N. Y.

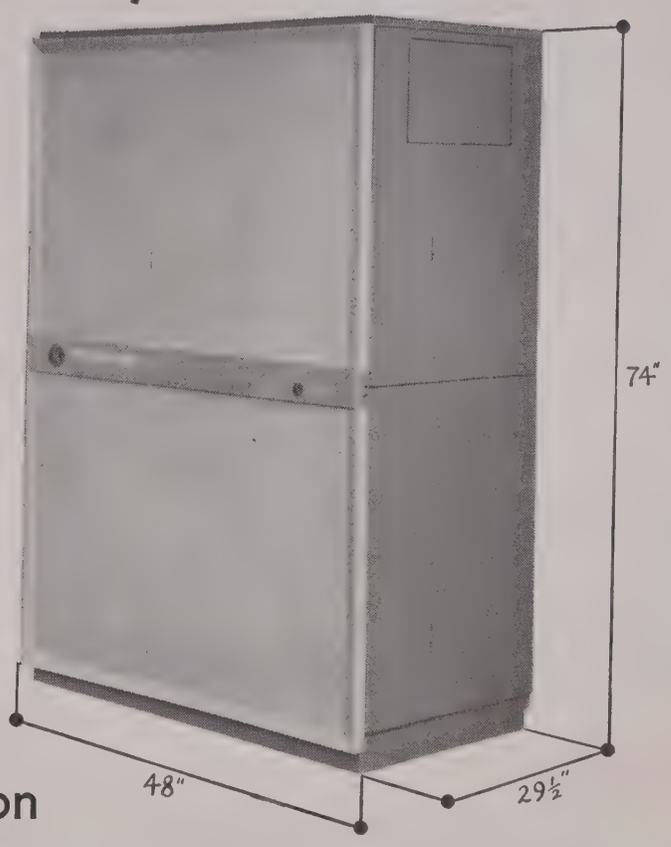


*** NOTE TO BUILDERS —**
The Spring-Summer issue is still available. It's full of ideas for you and your clients.
Suggest you get a copy today.

WEATHERTRON

THE GENERAL ELECTRIC ALL-ELECTRIC HEAT PUMP

A fully automatic, all-electric heating and cooling unit



- a *single* unit—not a combination of units
- uses no water... no combustible fuel
- filtered, forced-air circulation

GIVES NEW DESIGN FREEDOM

Complete flexibility of placement. Weathertron can be placed anywhere—in closet, crawl space, basement, attic, garage, service area, even outdoors! Weathertron thus allows more square footage of useable living space in homes of every design.

Elimination of installation complexities. Weathertron needs no water towers, pumps, wells or ground coils... no fuel tanks, fuel lines, gas connections, exposed piping or flues. All Weathertron needs is connection to outdoor air, to power supply and to indoor duct system, plus a simple drain for condensed moisture.

Thousands now in use prove dependability. Weathertron installations in thousands of homes, stores, offices and factories have not only proved the design benefits of Weathertron in a decisive way...they have established an excellent record for dependable, trouble-free performance.

See Sweet's File 30—S1. Complete Weathertron specifications are listed in Sweet's File. For additional information, call your local G-E Weathertron representative, listed in the Yellow Pages under Air Conditioning, or write L. Kress Carlbon, General Electric Company, Weathertron Department. 5 Lawrence Street, Bloomfield, New Jersey.

LIVE BETTER ELECTRICALLY

Progress Is Our Most Important Product

GENERAL ELECTRIC

GRADE-MARKED

SOUTHERN PINE

offers you these big

ADVANTAGES



MORE VERSATILE SOUTHERN PINE

The varied demands of modern construction makes Southern Pine the *natural* choice for its strength, beauty and adaptability.



MORE SALEABLE SOUTHERN PINE

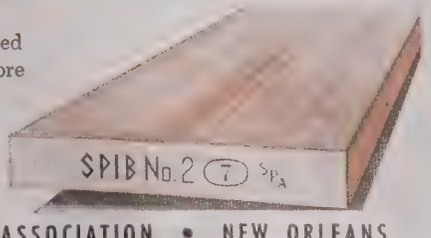
Consistent national advertising is selling new home buyers on the lasting quality of homes built of Southern Pine.



MORE AVAILABLE SOUTHERN PINE

Modern forest management plus modern manufacture assure you of a continuing supply of seasoned, uniformly sized Grade-Marked Southern Pine.

Demand Grade-Marked Southern Pine . . . more and more the choice of thoughtful new-home buyers



SOUTHERN PINE ASSOCIATION • NEW ORLEANS

specialty patterns

in genuine cork

dodge

cork tile flooring offers more features for greater customer satisfaction

DODGE floors in specialty patterns are luxurious in appearance, resilient as only genuine cork can be, and have exceptional wearing properties. Additional features are offered in three different surface finishes to meet individual preferences.

Dodge Vinyl-cork tile has a tough surface that requires no scrubbing or waxing. It is impervious to spots, stains and scratches. Dodge Standard cork tile is mellow in appearance and gives life-time service. And Dodge Standard cork tile with the new SG finish surpasses anything in its field. It is spot- and stain-resistant, water-repellent, and holds its luster with a minimum of care.



Narrowstripe Parquetry, one of Dodge's four exclusive specialty patterns, available in Vinyl-Cork* or Standard Cork Tile.

Write today for Catalog No. 56, and ask for a sample of the new SG finish. See also Sweet's Architectural File 13i/Do.

DODGE CORK COMPANY, INC.
LANCASTER, PA.



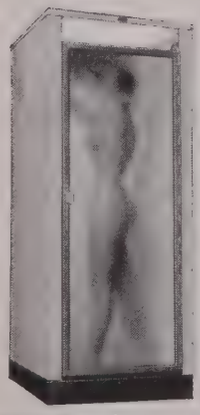
* Firestone Velon surface

quality BATHE-RITE shower cabinets

Introducing the new *Brooklyn* shower cabinet for the home of *distinction*



The new Brooklyn all-glass front, corner cabinet is designed to add beauty to bathrooms and save space without sacrificing comfort.



IMPERIAL — aluminum cabinet withstands any climatic condition — choice of 9 door styles.

"Refreshing as the Ocean Breeze"

Now you can feature this lovely corner shower cabinet in bathrooms or master bedrooms. The Brooklyn, corner entrance cabinet needs only a 36" x 36" area — can even be used in extra bath where space is at a premium.

The custom-built Brooklyn features modern plate glass panels mounted in extruded aluminum. Rear panels consist of colorful marbleized consoweld to harmonize with bath and bedroom color schemes.

The floor receptor is available in the finest precast twinkling terrazzo or porcelain steel for leakproof service. All fixtures are chrome plated for lasting beauty.

Easy to erect, the Brooklyn looks like it is custom-built right into the walls. Remember a Brooklyn corner cabinet can be installed in a 36" x 36" area.

When you sell or specify BATHE-RITE shower cabinets your jobs stay on schedule . . . because we ship over 95% of all orders within 24 hours.



SENATOR — cabinet available with four different floor receptor styles — choice of 9 doors.

REVERSIBLE DOORS made for finished opening of 22, 24 and 26 inches. Extruded aluminum satin finish or chrome polish frames and 3 types of glass doors — hammered, louvered and clear.

FLOOR RECEPTORS come in porcelain enamel steel, grey cement, buff and black granitex, and rich looking black and white terrazzo.

For COMPLETE DETAILS Write:
BATHE-RITE LITERATURE DEPT. HH-1

Quality Metal Products Since 1893

BATHE-RITE Shower Cabinet Division

MILWAUKEE STAMPING COMPANY, MILWAUKEE 14, WIS.

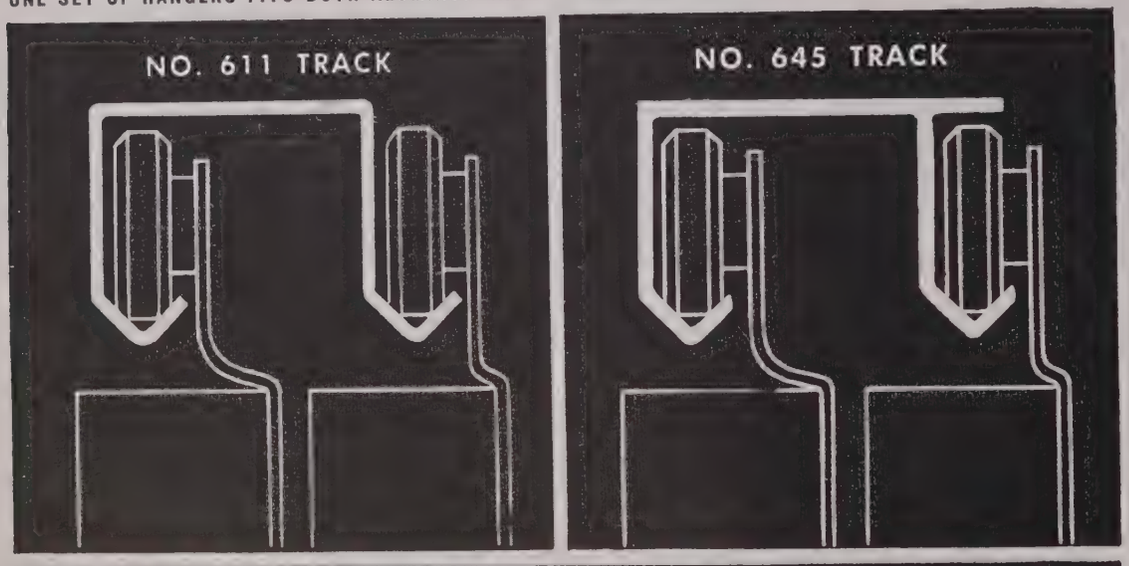
interested in quick rolling door installations at low cost?

the new washington® line

SIMPLIFIED

rolling door hardware offers universal track in steel or aluminum

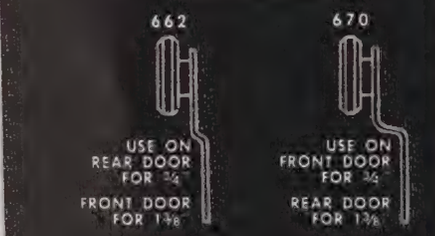
ONE SET OF HANGERS FITS BOTH ALUMINUM AND STEEL TRACK FOR ⅝" TO 1⅜" DOOR INSTALLATIONS



FEATURES OF BOTH THE STEEL AND ALUMINUM UNIVERSAL TRACK

- ANTI-JUMP TRACK
- WILL HOLD 60 LB. DOORS
- SELF-CLEANING "V" GROVE
- LOW COST
- INTERCHANGEABLE HANGERS AND TRACK
- AXLE OR BALL BEARING HANGERS
- BOTH STEEL AND ALUMINUM TRACK ACCOMMODATE DOORS FROM ⅜" TO 1⅜" THICK
- DOORS CAN BE TAKEN OFF TRACK WITHOUT REMOVING HANGERS

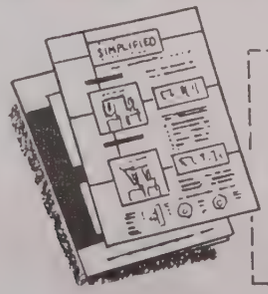
HANGERS



WASHINGTON LINE

WASHINGTON® LINE

MANUFACTURED BY WASHINGTON STEEL PRODUCTS, INC., DEPT. HH-6, TACOMA 2, WASHINGTON



For a free catalog on Washington® Line Rolling Door Hardware, and descriptive literature on the new *Universal* track, fill out coupon at right and mail to manufacturer.

To: **WASHINGTON STEEL PRODUCTS, INC.**
DEPT. HH-6, 1940 East 11th Street, Tacoma 2, Washington

Gentlemen: Please send me catalog on Washington® Line Rolling Door Hardware, and complete information on the new *Universal* Track:

NAME.....

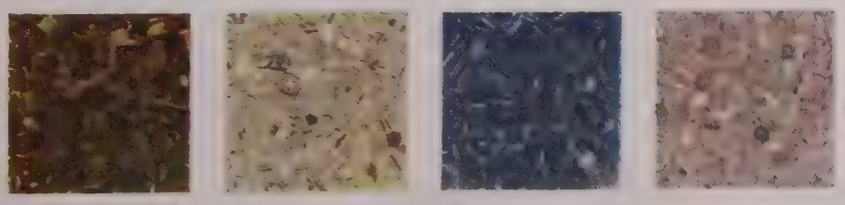
TYPE OF BUSINESS.....

ADDRESS.....

CITY.....ZONE.....STATE.....



"Agatine" reflects the clean good looks of today's smartest settings.



4 OF THE 16 BEAUTIFUL AGATINE COLORS

B.F.Goodrich

Agatine

a revolutionary floor tile with all the features that today's home buyers demand!

"Agatine" has everything that prospective home buyers look for in a floor tile: the quiet and comfort of rubber; a nonporous surface that resists dirt, nicks and scuffs; a crisp, modern design that actually hides footmarks! Made by an exclusive B. F. Goodrich process, "Agatine" is a *super-dense* composition of bright gems of color that go the whole tile through, for wear that will outlast the house. Put in your model homes it will take the heaviest traffic and come up shining!

"Agatine" can be laid on or above grade, over wood or concrete. Choice of 16 colors—.80 gage and 1/8" thickness (for heavier traffic areas).

Entrance in the grand manner (shown left) features "Agatine". Millions of potential customers will see it in 4-color ads appearing in Saturday Evening Post, Small Homes Guide and Better Homes and Gardens.

B.F.Goodrich

FOR SPECIFICATIONS:
Write B. F. Goodrich Co., Flooring Division, Dept. HH6
Watertown 72, Mass.

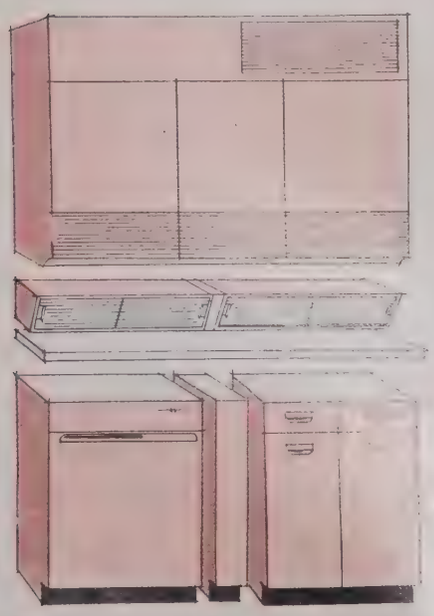
KOROSEAL TILE • RUBBER TILE • ASPHALT TILE • RUBBER COVE BASE • STAIR TREADS • ACCESSORIES

© 1950, The B. F. Goodrich Company

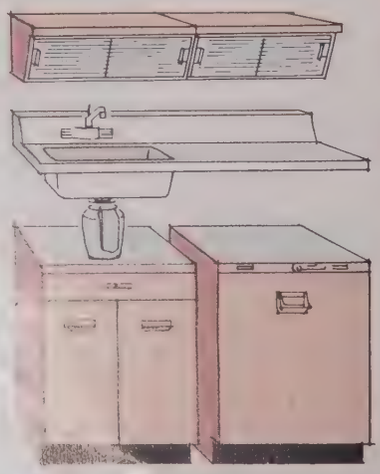
Now! Immediately available! General



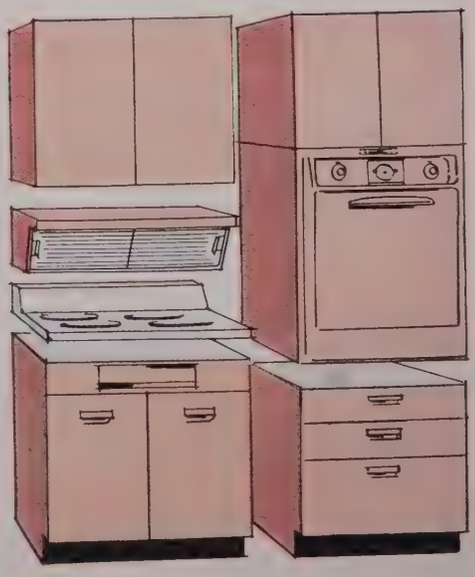
Unitwall design saves you cost of finishing interior of kitchen walls. Eliminates need for kitchen partitions. The General Electric Unitwall serves as a room divider. The back can be finished in any motif desired. Down to the last nut and bolt this Modular Kitchen is all G.E. And you get everything from one man—your G-E distributor.



1. Refrigerator Center—Includes 11-cubic-foot G-E Wall Refrigerator-Freezer, two sliding glass door G-E Cabinettes, five-cubic-foot G-E Pull-Out Freezer, G-E Base Cabinet, G-E Textolite® counter.

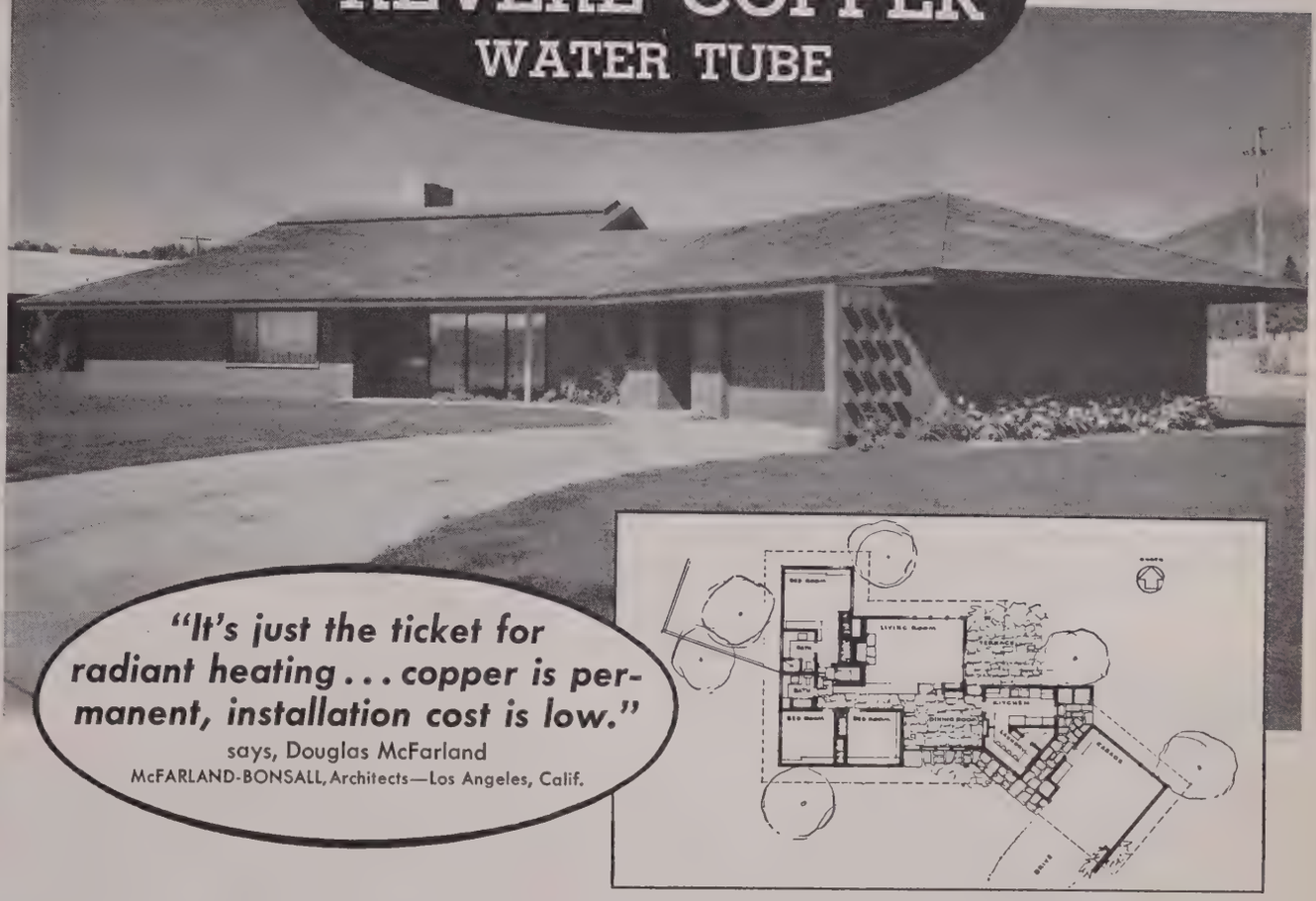


2. Sink Center—Includes G-E Cabinettes, G-E Porcelain Sink with base cabinet, G-E Textolite counter, G-E Disposall,® G-E Under-counter Dishwasher. G-E Accessory Cabinets available in Mix-or-Match colors.



3. Range Center—Includes G-E Wall Cabinet, G-E Cabinette, G-E Calrod® surface units with Textolite counter, base cabinet, G-E Oven-top Cupboard Cabinet, G-E Built-In Oven, G-E Oven-base Cabinet.

what they're saying about REVERE COPPER WATER TUBE



"It's just the ticket for radiant heating . . . copper is permanent, installation cost is low."

says, Douglas McFarland

McFARLAND-BONSALL, Architects—Los Angeles, Calif.

Continued Mr. McFarland, "The use of radiant heat panels gives the architect practically unlimited flexibility in design. And the selection of copper tube for those panels virtually assures an installation that is completely satisfactory in every respect."

In this home designed for the M. C. Purcell's of Flagstaff, Arizona more than 1800′ of Revere Copper Water Tube were used for the radiant panel heating system and the water supply lines.

The satisfactory performance turned in by copper water tube for hot and cold water lines and underground service lines over the years led to its ready adoption by architects, contractors and builders when heating by radiant panels came into vogue. Now copper is being used in increasing quantities for drainage, waste and vent stacks . . . uses which you should investigate immediately. Send today for folder giving details on Revere DWV Copper Tube.

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, N.Y.

Mills: Baltimore, Md.; Brooklyn, N. Y.; Chicago Clinton and Joliet, Ill.; Detroit, Mich.; Los Angeles and Riverside, Calif.; New Bedford, Mass.; Newport, Ark.; Rome, N. Y. Sales Offices in Principal Cities, Distributors Everywhere.

COPPER ★ BRASS ★ REVERE ★ ALUMINUM 18 01

WHY REVERE COPPER WATER TUBE IS PREFERRED BY ARCHITECTS, ENGINEERS, BUILDING AND PLUMBING CONTRACTORS

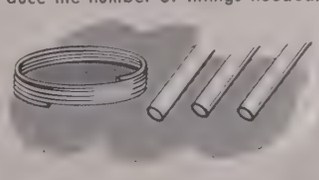
SOLDER OR COMPRESSION FITTINGS—

Need Less Work Room . . . Save Metal. No worry about wrench room when you use Revere Copper Water Tube with solder fittings. Compression fittings can also be used. No threading is necessary with either type. Wall thickness of tube used can thus be less than for threaded pipe.



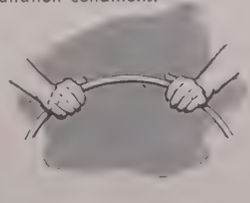
HANDY LENGTHS—

Save Fittings . . . Labor. Revere Copper Water Tube comes in straight lengths of 20′ in hard and soft tempers. 60′ coils of soft temper reduce the number of fittings needed.



EASY TO BEND—

Saves Time. Revere Copper Water Tube is easy to bend. Soft temper can be bent by hand to meet installation conditions.

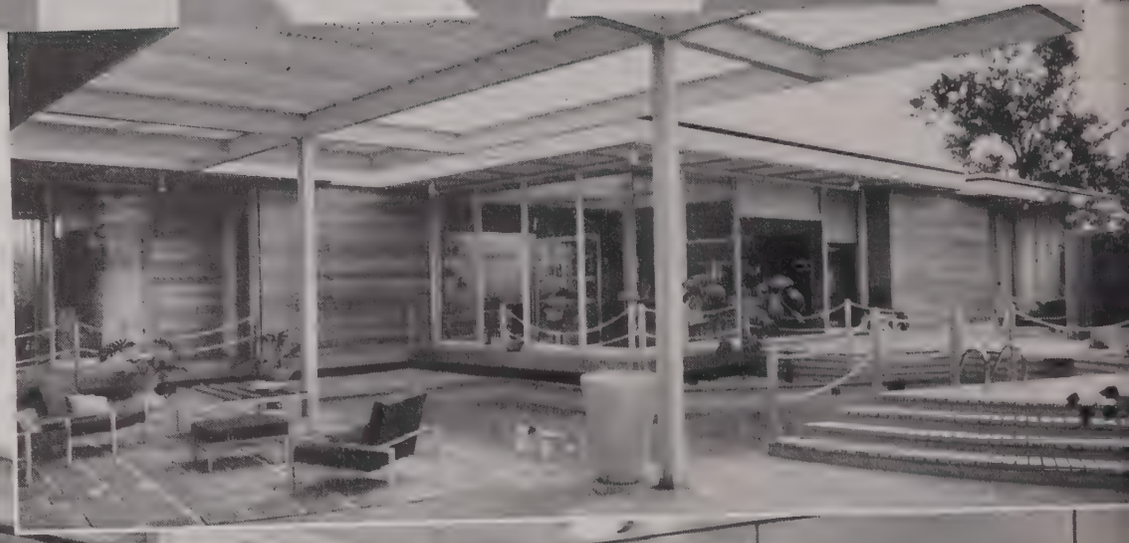


NON-RUSTING—

Rustable pipe eventually clogs as shown in drawing at top. Non-rustable Revere Copper Water Tube suffers no loss of flow or pressure as shown at bottom. No allowance in pipe size need be made for rust accumulation with Revere Copper Water Tube.



CRA



"This is the best," say 2,000 contractors. This Los Angeles fairgrounds model house was built to say *one thing* . . . "This is the finest." It shows. It shows in the imaginative planning, craftsmen construction . . . and the selection of quality materials . . . like Crane fixtures.

The new look in bathrooms. No longer is the bath the unmentionable room. It's the room guests see and judge. No wonder 2,000 contractors put their best foot forward with this Crane-equipped bath.

THE
PREFERRED
PLUMBING

2,000 California contractors present world's finest model home

A dream house to end all dream houses . . .

That's how you could describe the model home of the Building Contractors Association of California. It was built in the Los Angeles fairgrounds to say but *one thing* . . . "*This* is the very best."

Look, for example, at the big *double* bathroom . . . each with two Crane Criterion lavatories in a sweeping counter-top that sets a tone of quiet elegance. Both rooms are equipped with a Crane Criterion water closet. A tub in one and a shower in the other prevent a "bottleneck" at breakfast time.

These Crane fixtures are styled by Henry Dreyfuss to look modern *years* longer. They are engineered by Crane to last longer, too.

You can give your customers Crane fixtures *without* adding to your construction costs. Crane fixtures are priced to meet every budget. And *throughout* the line . . . Crane quality costs no more. Why not get details from your Crane Branch or Crane Wholesaler today?

CRANE CO. General Offices: 836 S. Michigan Ave., Chicago 5 • VALVES • FITTINGS • PIPE • KITCHENS • PLUMBING • HEATING



CRITERION 1-80, on metal legs. A striking vitreous china lavatory. Exclusive Dial-ese controls and lever-action Securo waste. Satin finish chromium plated Criterion trim has clear Lucite handles. Spacious rectangular basin, splash lip and front overflow. Sizes: 21½"x17¾" and 30¼"x22".



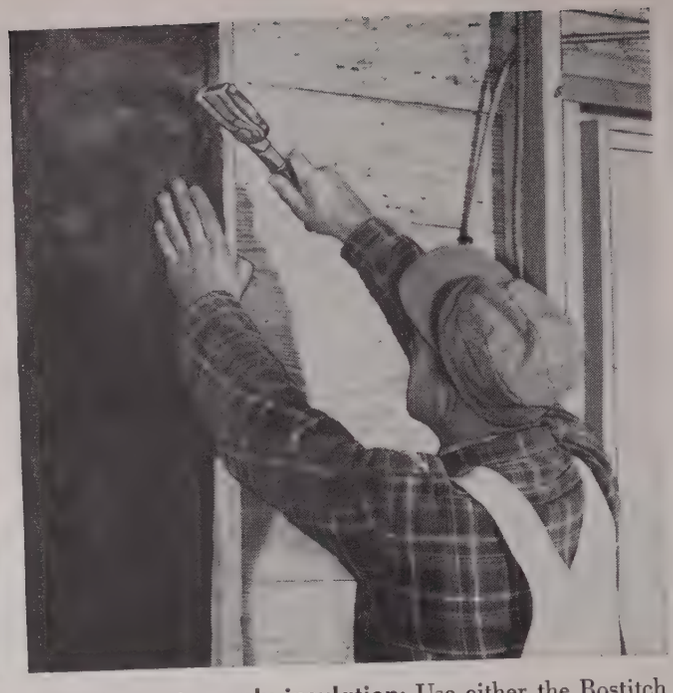
CRITERION 3-102. A distinctive modern closet with correct-posture seat. Bowl has elongated rim. Matching tank of gleaming vitreous china. Efficient siphon jet with quiet whirlpool action. Flat-topped cover telescopes over saddle-shaped seat.



CRITERION 2-80-LC. Finest of all Crane baths. Gleaming porcelain enamel over heavy cast iron. Available in right- or left-hand corner styles, 5′ long. Recess styles 5′ and 5½′. Has broad rim seat, flat safety bottom. Deviator overrim supply and shower. Easy-action Dial-ese controls.



Best way to put up ceiling tile: Use a Bostitch T5-8 Tacker with Bostitch 9/16″ or 1/2″ staples. Press nose of tacker firmly into cove formed by tile flange. Squeeze the lever. You can drive three staples 4″ apart in about three seconds and go on to next tile. You never mar the face of the tiles, and you can wear gloves to keep them clean.



Fastest way to apply insulation: Use either the Bostitch T5-8 Tacker or H2B Hammer, with Bostitch 3/8″ staples. The hammer is faster with a little practice. You can drive staples with a flick of your wrist—*much* faster than hammer and nails. One hand is free to position the insulation. Available at your building supply dealer or local Bostitch office.

Install ceiling tile and insulation the way leading manufacturers approve

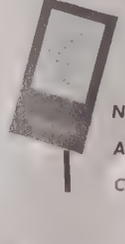
In co-operation with leading makers of ceiling tile and insulation, Bostitch has prepared a booklet which gives detailed instructions for installing these materials. The following firms have contributed important information for this booklet and approve this method of installation.

Armstrong Cork Company . . . . . makers of Temlok® Tile, Temlok® Plank and Cushiontone®.
The Celotex Corporation . . . . . makers of Celotex Tile Board and Finish Plank and Celotex Regular and Reflective Rock Wool Blankets.
Infra Insulation, Inc. . . . . . makers of Infra Multiple Aluminum Thermal Insulation.
Minnesota & Ontario Paper Company . . . . makers of Insulite Tile Board, Plank, and Interior Board.
National Gypsum Company . . . . . makers of Gold Bond Insulation Board Products and Rock Wool Insulation.
Reynolds Metals Company . . . . . makers of Reynolds Reflective Aluminum Insulation.
Simpson Logging Company . . . . . makers of Decorative Tile Board, Acoustical Tile, and Insulating Board.
United States Gypsum Company . . . . . makers of Twin-Tile, Panel-Tile, Quietone, Auditone, USG Insulation Plank, and Red Top Insulating Wool.
American Sisalkraft Corporation . . . . . makers of Sisalkraft and Sisalation.
Wood Conversion Company . . . . . makers of Balsam-Wool and Nu-Wood Ceiling Tile.

FREE BOOKLET — SEND COUPON FOR YOUR COPY

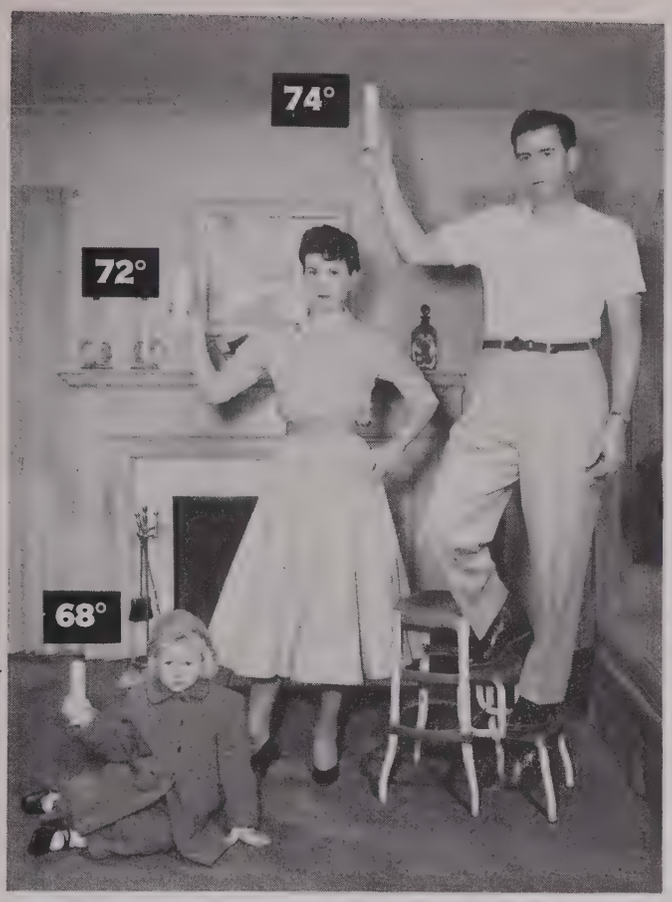
Fasten it better and faster with

BOSTITCH
STAPLERS AND STAPLES

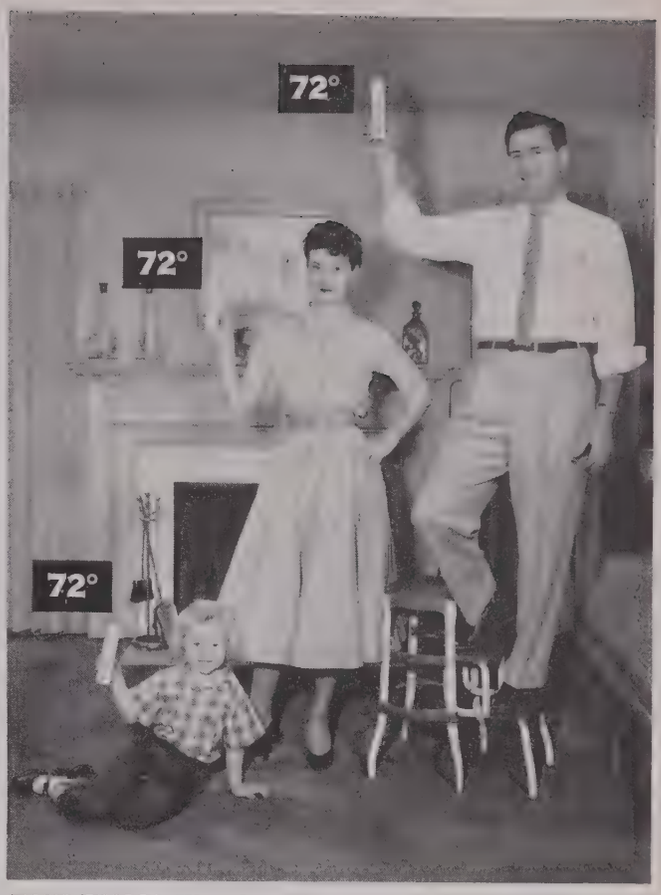


BOSTITCH, 526 Mechanic Street, Westerly, R. I.
Please send me your free booklet describing the best way to install ceiling tile and insulation.

Name _____
Address _____
City _____ *Zone* ____ *State* _____



NOT THIS! *Many heating systems make you uncomfortable. It's too cold at the floor, just right in the middle of the room, too hot near the ceiling.*



BUT THIS! *Waterbury* COMFORTROL *By-Pass Heating gives* CONSTANT *comfort. Tests have shown less than one degree temperature variation from floor to ceiling.*

New kind of heating gives home buyers the constant comfort they want

The family at left complains. The family at right recommends the builder of its home to friends. Reason? The family at right has the constant comfort every home buyer expects.

To help you deliver constant comfort, Waterbury has developed COMFORTROL By-Pass Heating.

COMFORTROL works on a very efficient principle. It *mixes* cool air with warm air in a ratio that provides the exact temperature called for by indoor-outdoor thermostats. It supplies this warmth continuously at the same rate it escapes through walls and windows. Waterbury COMFORTROL By-Pass Heating takes maximum advantage of perimeter heat distribution and zone controls.

Your buyers get absolutely constant comfort in every room. They have a continuous supply of fresh, clean, humidified air. There are no hot and cold cycles or drafts. In tests, temperature has varied less than one degree between floor and ceiling.

If you've ever needed an extra feature to close a sale, you'll appreciate the talking points alone of Waterbury COMFORTROL.

COMFORTROL combines perfectly with a Waterbury cooling unit.

SEND FOR FREE 32-PAGE BOOKLET!

"It Takes More Than Heat To Be Comfortable". It's packed with interesting information that will help you sell more units. Write Waterman-Waterbury Company, 1150 N. E. Jackson Street, Minneapolis 13, Minnesota.



Waterbury helps you sell homes!

Waterbury Comfortrol BY PASS HEATING

By the makers of world-famous Waterbury furnaces and air conditioners

Here's window beauty that says, "this is a quality home"



Andersen *Windowalls*

TRADEMARK OF ANDERSEN CORPORATION



Andersen WINDOWALL *featuring Flexivent and Flexiview Units.*
Stanley C. Reese, Architect; Raymond J. Smith, Jr., designer.

Here's a dining room with a magnificent view, framed by Andersen Flexiview and Flexivent Units. The Flexivents open wide to admit a flood of fresh air. Yet they *close tight* to form a weatherproof barrier. They're both walls *and* windows . . . Andersen WINDOWALLS, made of toxic-treated, insulating, beautiful wood. Yes, the charm and beauty of Andersen WINDOWALLS quickly convince customers that homes are quality-built throughout!

For information on how you can create quality with Andersen WINDOWALLS in the homes you plan or build, see your lumber and millwork dealer, Sweet's Light Construction File or write Andersen. WINDOWALLS are sold throughout the country, including the Pacific Coast.

ANDERSEN CORPORATION • BAYPORT, MINNESOTA



RICHMOND

the fastest growing name in plumbing fixtures



...THE COLORS– choice of seven sparkling pastels or famous Richmond "Whiter-White."

...THE STYLING– designs to fit every plumbing need–residential, commercial, industrial.

...THE ENGINEERING– quality-controlled manufacturing that gives lasting consumer satisfaction.

...THE BRAND ACCEPTANCE –building steadily through extensive national advertising.

TO BUILD YOUR
REPUTATION FOR QUALITY
AND BRING SALES YOUR WAY



RICHMOND
PLUMBING FIXTURES
DIVISION OF RHEEM
MANUFACTURING COMPANY
16 Pearl Street, Metuchen, New Jersey

WRITE FOR NEW ILLUSTRATED CATALOG

Richmond Creates the Finest Bathroom and Kitchen Plumbing Fixtures, Heating • Cooling Equipment

Other Rheem Products: WATER HEATERS • WATER SOFTENERS • WEDGEWOOD GAS RANGES AND CLOTHES DRYERS • STEEL AND FIBRE CONTAINERS

BUILDERS GUARANTEE THEMSELVES AN EXTRA PROFIT ON EVERY HOUSE!

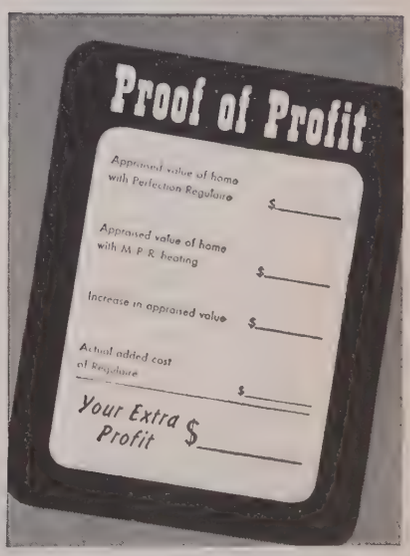
Here's how!



STOP trying to save a couple of bucks on buying furnaces. Start making a healthy profit on them instead. The sure way to do it is this Perfection way . . .



FEATURING a *better* furnace *can help you sell your house.* And, when that furnace is a Perfection with Regulaire Modulated Heat, you realize an extra profit in your pocket, too.



THERE'S NO MYSTERY ABOUT IT! Houses equipped with Perfection Regulaire furnaces bring a *higher* loan appraisal. You can figure out the profit for yourself.

The extra profit you make with every Perfection installation is only one reason why it pays to use Perfection in your new homes and modernization jobs.

You automatically qualify for a brand-new, *workable,* home selling idea, the Perfection "GUARANTEED COMFORT" home. This "hot" new promotion helps attract more prospective buyers, assures them that *their* comfort is your prime consideration. So *go* with the furnace that's going *all out* to help you. See your Perfection *guaranteed* dealer or write Perfection Industries, Division of Hupp Corporation, 7706-C Platt Avenue, Cleveland, Ohio.

OPERATION HOME IMPROVEMENT '56 the year to FIX

TALK TO

A Perfection

AUTOMATIC HEATING • SUMMER COOLING • HEAT PUMPS

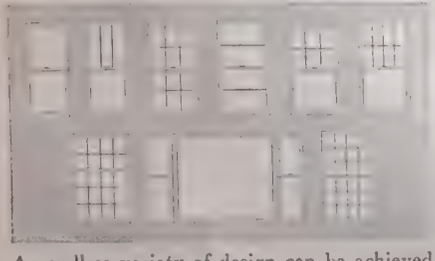


The Peirce-Nichols House, Salem, Mass., built in 1782. Samuel McIntire, while in his early twenties and without any formal training in architecture, designed this house for a wealthy East Indian merchant of Salem, named Jerathmiel Peirce.

Double Hung Wood Windows Add Beauty to 174-Year-Old Peirce-Nichols Home



Relative inexpensiveness permits generous use of double hung wood windows with metal weatherstripping, even in the most modern homes.



An endless variety of design can be achieved with double hung wood windows. They are easily shaped and their surface receives and holds any type of finish.

Peirce was a man who could afford the best—and in this case got it, because this was considered about the finest wooden house in America. Not only was it McIntire's design, but every important piece of carving was done by his own hands, from the original urns that capped the fence posts to the doorways, cornices and mantels within. You can be sure it pleased Mr. Peirce.

Adding to the beauty and design of the Peirce-Nichols house are the double hung wood windows . . . permitting ample light and ventilation for every room. The natural insulating property of the wood helped keep the interior cool because the heat of the sun could not readily penetrate.

Today, double hung wood windows are still the most popular type of window for the modern home; and their efficiency has been increased by the addition of modern spring sash balance and metal weatherstripping to bring weather-tightness, seasonal adaptability, and economical maintenance.

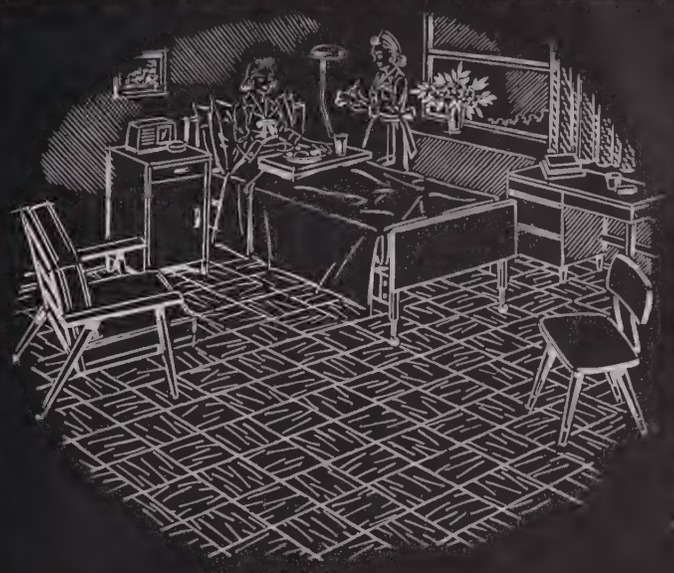
Architects, builders and home owners know that double hung wood windows with metal weatherstripping are best for durability, structural correctness and operational efficiency.

WEATHERSTRIP *Research* INSTITUTE

OFFICE OF THE SECRETARY, BOX 128—RIVERSIDE, ILLINOIS

MEMBERS:

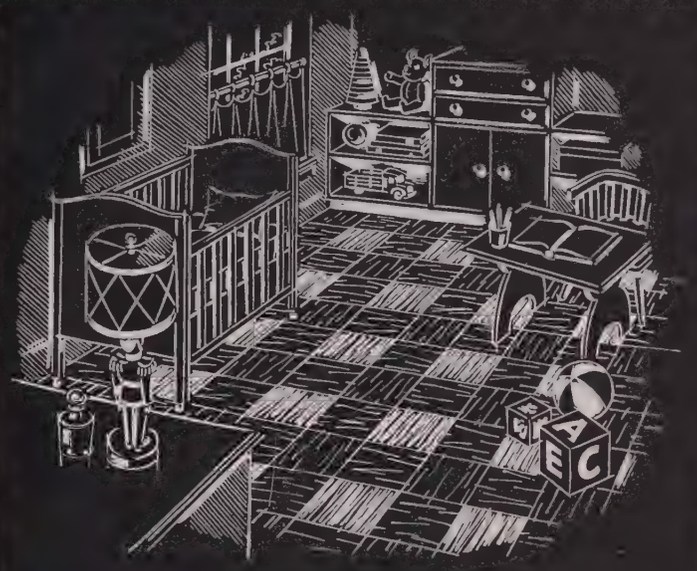
ALLIED METAL WEATHERSTRIP CO.
BARLAND WEATHERSTRIP MATERIAL CO.
CENTRAL METAL STRIP CO.
CHAMBERLIN CO. OF AMERICA
DENNIS & CO., W. J.
DORBIN METAL STRIP MFG. CO.
GARDNER WIRE CO.
MACKLANBURG-DUNCAN CO.
MASTER METAL STRIP SERVICE
MONARCH METAL WEATHERSTRIP CORP.
NATIONAL GUARD PRODUCTS, INC.
NATIONAL METAL PRODUCTS CO, INC.
NICHOLS METAL STRIP SERVICE
PEMKO MFG. CO.
PRECISION WEATHERSTRIP CO.
REESE METAL WEATHERSTRIP CO.
SOUTHERN METAL PRODUCTS CORP.
WARNICA PRODUCTS
ZEGERS, INC.



HOSPITALS



CHURCHES



NURSERIES

WRIGHT MANUFACTURING COMPANY
Div. of Mastic Tile Corporation of America
Dept. W14-6 P. O. Box 986, Newburgh, N. Y.

Please send me full details on WRIGHT Rubber Tile and Vinyl Tile

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

WR 11

where beauty should be seen ...but not "heard"

RUBBER TILE flooring by

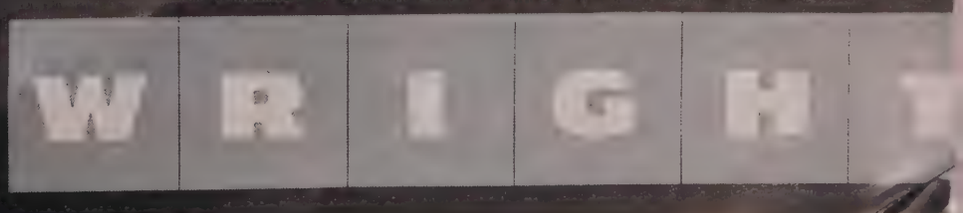
Here is truly outstanding flooring. In any surroundings, it imparts a hushed, quiet air of unmistakable distinction. Manufactured to meet the highest standards of beauty and serviceability, WRIGHT Rubber Tile is unexcelled for its deep, rich colors, its restful resiliency and exceptional durability. Unusually tough, it wears like new for years, resisting the severest use and proving ideal for ease and economy of maintenance.

Here, indeed, is the ultimate in tile flooring ... reflecting incomparable quality in every characteristic. When you seek the supreme achievement in flooring that combines beauty, quiet comfort and serviceability, WRIGHT Rubber Tile will be your inevitable choice!

WRIGHT MANUFACTURING COMPANY Division of Mastic Tile Corporation of America
Houston, Texas • Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.

Asphalt Tile • Confetti • Aristoflex • Maticork • Parquetry • Rubber Tile • Vinyl Tile • Cork Tile • Plastic Wall Tile







Invite Inspection . . . Help Sell the Home

Two favorable impressions are better than one. And that's how Ro-Way garage doors can help you sell homes.

First, Ro-Way doors invite inspection of your entire property. Their clean, persuasive styling complements any architecture. Creates eye-catching interest. Attracts more than a fair share of home-buying prospects.

And when you're closing the sale, Ro-Way's smooth, quiet performance helps out again. Here's easy action up or down—from a perfectly balanced overhead type door you open or close with little effort. Favorable impression No. 2.

We could go on. There's Taper-Tite track and Seal-A-Matic hinges for weather-tight protection. Mortise and tenon joints both glued and steel doweled for extra strength and long life. And exclusive Ro-Way hardware, both Parkerized and painted to prevent rust and stain.

These quality features please home buyers, let them know you haven't skimped . . . *anywhere*. See your Ro-Way distributor now. Or write direct for free literature. You'll like our line.



Only a Garage Offers:

- COMPLETE PROTECTION
- EXTRA STORAGE SPACE
- FINISHED APPEARANCE
- AN EXTRA ROOM

SEE OUR CATALOG IN SWEET'S

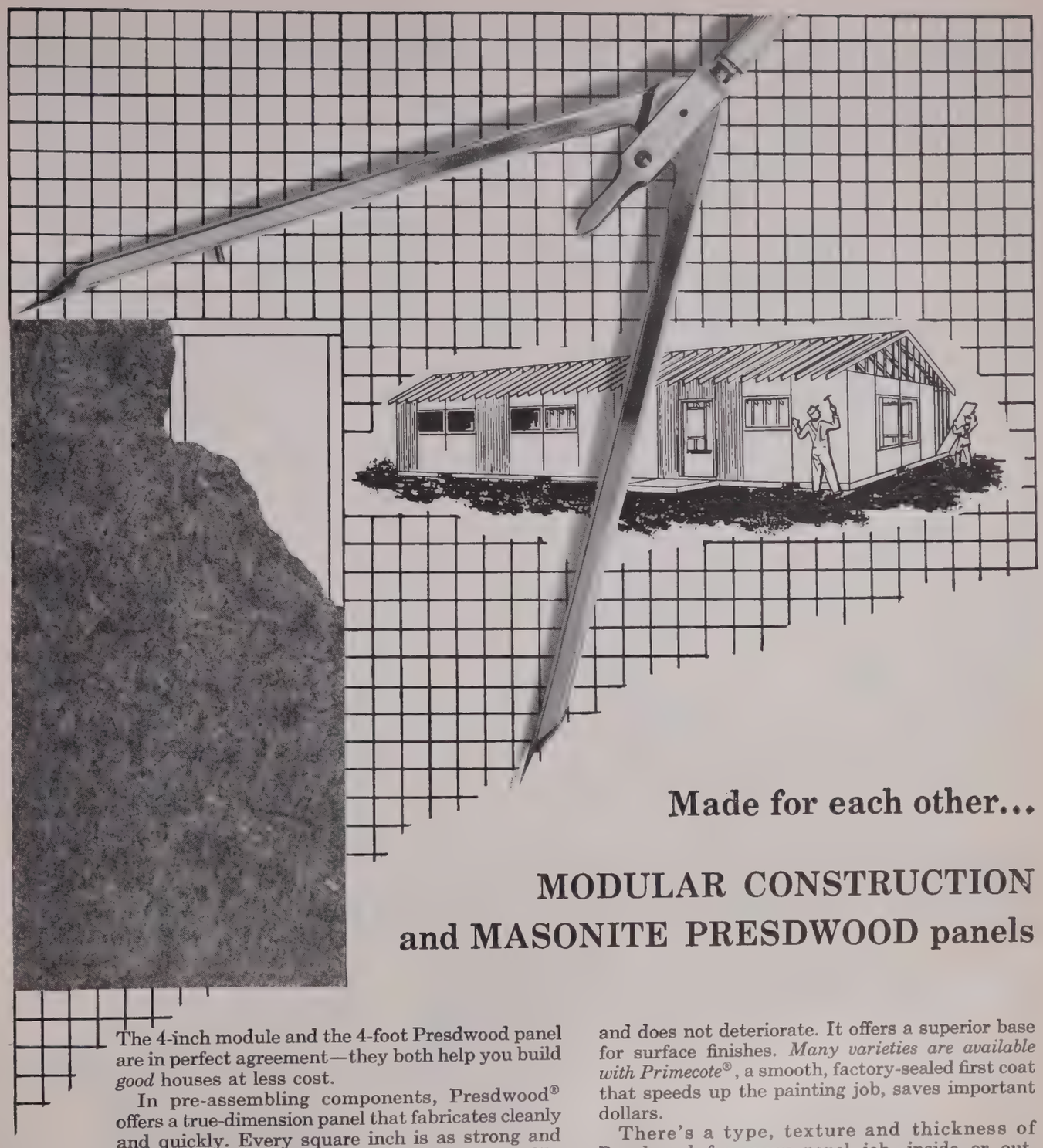
there's a Ro-Way for every Doorway!

RESIDENTIAL • INDUSTRIAL • COMMERCIAL

Nationwide sales and installation service. See your classified telephone directory for nearest Ro-Way Distributor.

Rō-Way
OVERHEAD TYPE
DOORS

ROWE MANUFACTURING CO.
1166 HOLTON ST., GALESBURG, ILLINOIS



Made for each other...

MODULAR CONSTRUCTION and MASONITE PRESDWOOD panels

The 4-inch module and the 4-foot Presdwood panel are in perfect agreement—they both help you build *good* houses at less cost.

In pre-assembling components, Presdwood® offers a true-dimension panel that fabricates cleanly and quickly. Every square inch is as strong and sturdy, as *usable* as the next. Presdwood is readily and securely fastened; it won't split, splinter or crack.

At the job site, Presdwood demonstrates other advantages: dense and hard, it contributes to structural strength, resists dimensional change and does not deteriorate. It offers a superior base for surface finishes. *Many varieties are available with Primecote®*, a smooth, factory-sealed first coat that speeds up the painting job, saves important dollars.

There's a type, texture and thickness of Presdwood for every panel job, inside or out. Smooth on one or both sides. Leather-textured, comb-textured, perforated, tile-patterned or grooved. Exterior lap siding, shingles or panels.

The Presdwood family can fit into *your* modular plans. Send the coupon for a free, illustrated booklet.



MASONITE® CORPORATION
Dept. HH-6, Box 777, Chicago 90, Ill.
Please send me your free booklet "All Through the House."

Name.....

Firm.....

Address.....

City.....*State*.....

Zone.....*County*.....



Sargent AlignaLocks help you BUILD...

...then help you SELL!

No other lock can be installed faster!

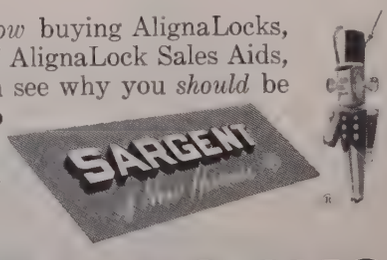
Installation time can cost you *plenty!* But *not* with Sargent AlignaLocks! Even your newest carpenters install these high quality LOW COST locks fast and economically. And that's money in *your* pocket!

No other lock gives you these sales aids!

Sargent offers you a big kit of free sales aids that help to sell your homes. Guarantee certificates for door knobs. Literature for prospects. Signs for display.

If you are using AlignaLocks now . . . get the full benefit by using these proven sales aids.

If you are not *now* buying AlignaLocks, send for a free kit of AlignaLock Sales Aids, anyway. You'll soon see why you *should* be using them. Write to Sargent & Company, New Haven 9, Conn. Dept. 11C.

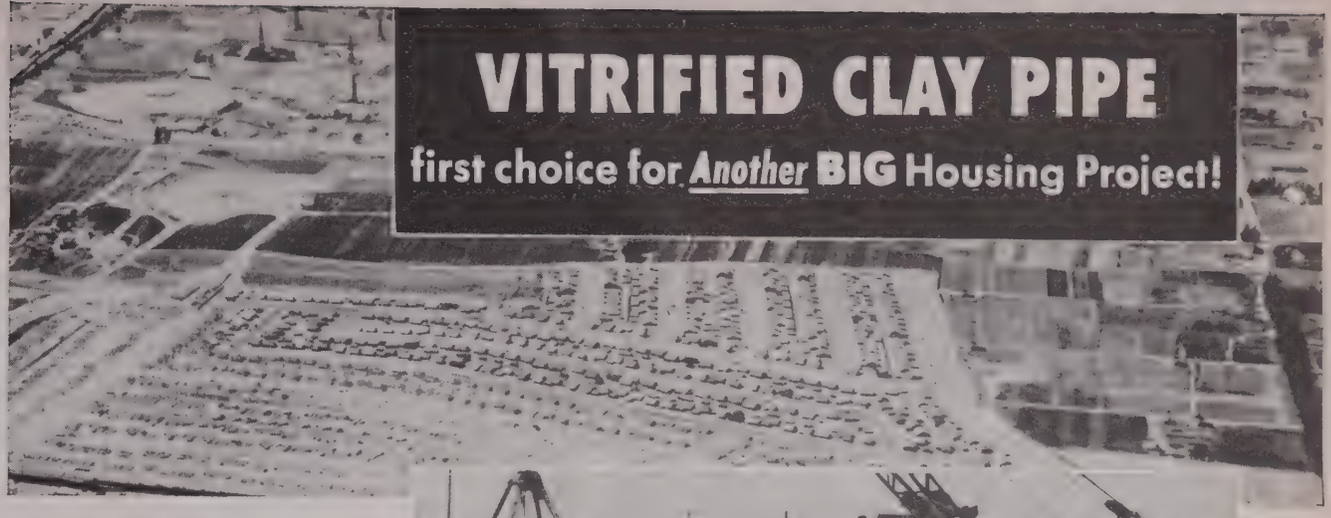


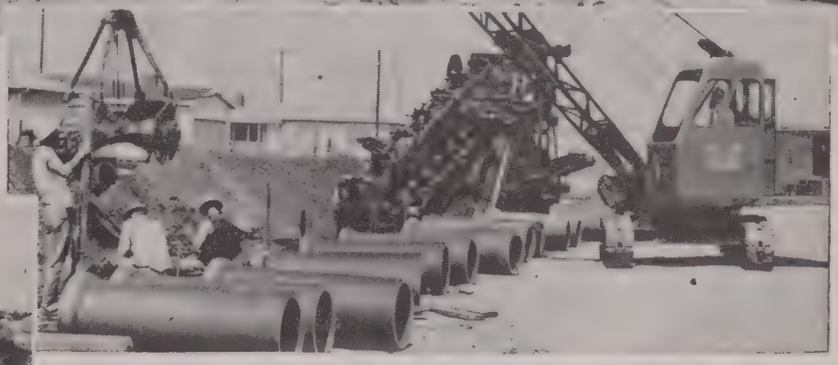
SARGENT LOCKS

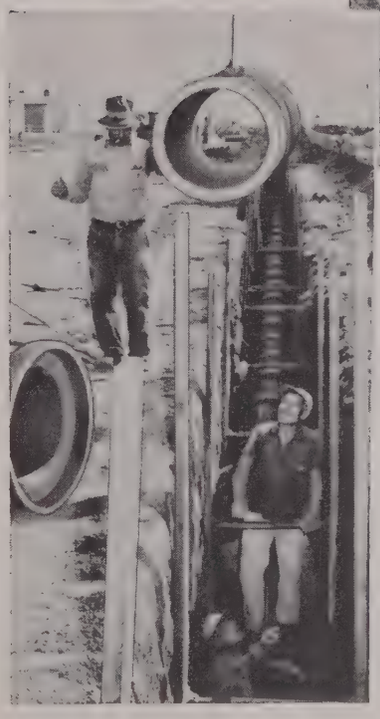
"Sign of a well built house"

VITRIFIED CLAY PIPE

first choice for *Another* BIG Housing Project!







TORRANCE, CALIFORNIA is attracting new families by the thousands with an unusual combination of job opportunities, ideal climate, and beautiful beaches. To meet the tremendous demand for modern housing, the vast Southwood Homes project is well underway, with a total of 2200 new homes planned and 816, comprising the first unit, already under construction. More than 67,000 feet of 4 through 18-inch Vitrified Clay Pipe have been installed as house connections, feeders, and mains.

Like many other mass-construction builders, those in charge of Southwood Homes know that it pays to use the best in sewerage materials. It pays in faster, more economical construction, as well as in dependable, trouble-free service—since Clay Pipe is the only sewerage material that is guaranteed . . . and *never wears out.*

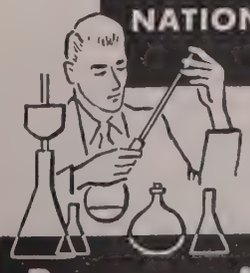
Owner, subdivider, and contractor: Milton Kauffman—Don Wilson Co.

Sewer system designer: The Engineering Service Corp.

Sewer contractor: N. A. Artukovich Construction Co.

Vitrified CLAY PIPE

CLAY PIPE NEVER WEARS OUT!



NATIONAL CLAY PIPE MANUFACTURERS, INC.
1820 N. Street, N.W., Washington 6, D. C.

206 Connally Bldg., Atlanta 3, Ga.
100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.
703 Ninth & Hill Bldg., Los Angeles 15, Calif.
311 High Long Bldg., 5 E. Long St., Columbus 15, Ohio

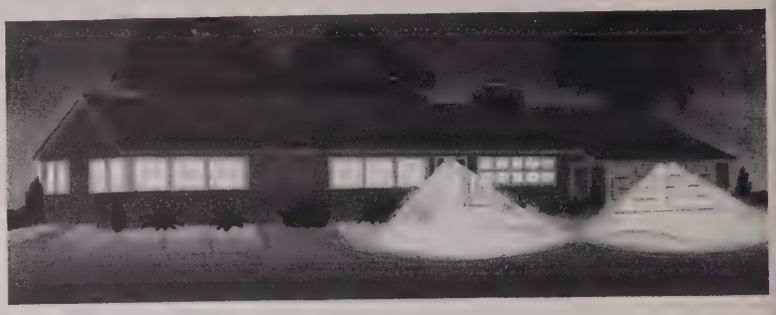
C-506-1

Progress in Public Health - Through Clay Pipe Research

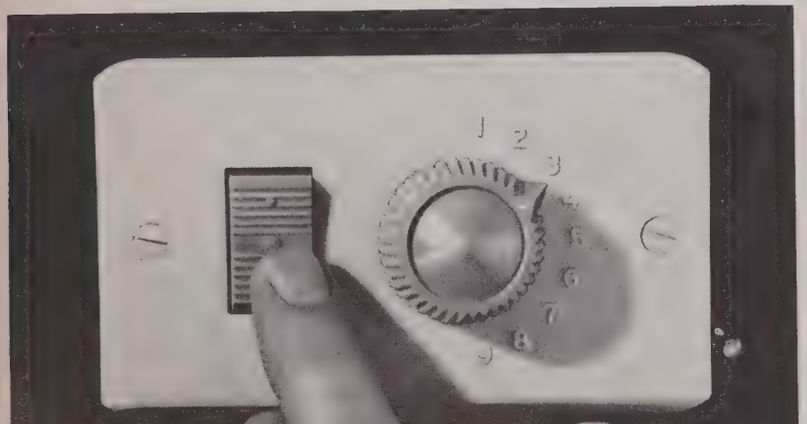
Here's why G-E Remote-Control Wiring SELLS HOUSES

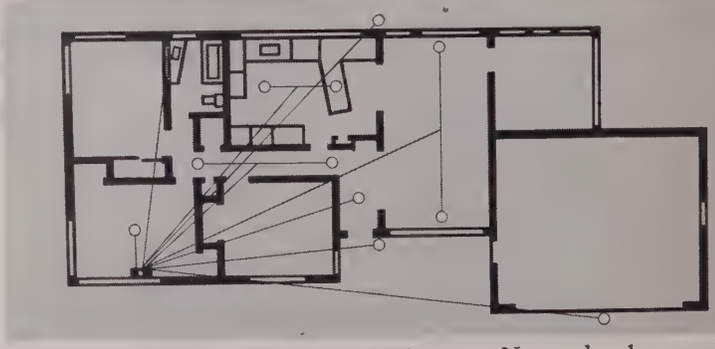
As determined from interviews with 555 owners of new homes equipped with G-E Remote Control





This command of house lights sells the women. From her bedside she can control important lights in and around the home . . . light up outdoors and indoors at the slightest sound. Gives a feeling of real security whenever the housewife is alone. Or the home-owner can light the way to a child's room, bath, or kitchen before getting out of bed, turn lights OFF after returning.





This step-saving convenience sells the men. No need to be concerned about lights that might be left ON. By using the bedside Selector Switch, the home-owner can make sure all the lights it controls are OFF. No steps and time spent in checking. There's also the convenience and security of being able to walk into a fully-lighted house. A *second* master selector switch located in the garage or entry hall turns ON selected lights, turns OFF these lights when the family goes out.

Like other reliable electrical control systems — for example, your dial telephone — G-E Remote-Control Wiring uses low-voltage operated relays to do the control switching of line voltage circuits.

Luxury — at Low Cost

With this modern wiring system, the home-owner can turn *one* light OFF, or ON, from many locations. He can also turn a number of lights ON and OFF (as many as 25 with the Deluxe Master Control) from one switching point.

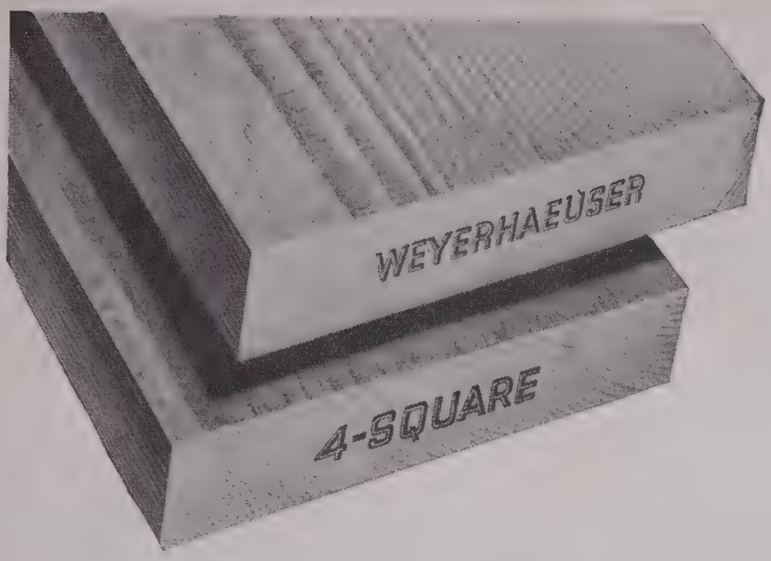
G-E Remote-Control Wiring is economically practical for homes of any size — or price. You can add this dramatic sales feature to your homes at a cost only slightly more than regular wiring.

A Real Selling Feature

So install G-E Remote Control of lights in the homes you build. Let this convenient system of wiring prove to you that it speeds home sales. The "G-E Remote-Control Wiring Manual" shows how to layout, estimate, and install this modern wiring system, with easy-to-follow, step-by-step instructions. Write Wiring Device Department, General Electric Company, Providence 7, R. I.

Progress Is Our Most Important Product

GENERAL ELECTRIC



This brand name brings you a report on...

Glued-Up Lumber

The public finds many uses for wide Glued-Up Lumber

● People are doing interesting things with glued-up lumber. Here are just a few of the uses that have been reported to us recently—uses which reflect the confidence of the public in Weyerhaeuser 4-Square Glued-Up Lumber.

"I'm buying 1" x 30"—5' B & Btr VG stock for use as surfboards." This is a good demonstration of the strength of the glue joint on exposure to water.

"A considerable amount of 1" x 12" and 1" x 14" VG is going into the construction of flower boxes and housing for window cooling units." Most builders who have had experience with glued-up lumber order "glued-up and/or regular" when they need wide lumber for interior or exterior use.

"Around here, people are using glued-up for such things as bleacher seats, feeding racks, and trailer side boards." One of the most common uses reported was for grain wagon boxes and similar farm construction.

"A lot of glued-up lumber goes to small cabinet shops for use in cabinet doors, counter tops and shelves." Glued-up is equally popular for exterior use, with many builders reporting they use it for siding, fascia, trim and soffits.

It will pay you to discuss the advantages of using Glued-Up Lumber, with your Weyerhaeuser 4-Square Lumber Dealer.

Weyerhaeuser Sales Company

ST. PAUL 1, MINNESOTA

OPERATION HOME IMPROVEMENT '56 the year to FIX



Gives builders MORE FOR THE DOLLAR *by far*

Much more in glamor, design, features too! Welbilt-In brings you the 'new look' that helps close sales quickly. It's the stand-out luxury built-in range designed to fit quickly and economically into all standard kitchen cabinets. *Nobody knows builders' requirements better than Welbilt.* From Maine to California, with big and small builders, Welbilt outsells all other ranges.

WELBILT-IN—YOUR CHOICE OF GAS OR ELECTRIC WITH IDENTICAL DIMENSIONS

Wall oven-broiler—Easily placed at the height most convenient for no-stoop, easy reach broiling and baking. • Luxurious exterior finish in satin chrome or new "coppertone" porcelain enamel to match every custom kitchen decor. • Kleer-Vue Oven Window and Light, electric clock, 4-hour minute minder.

Dimensions: Gas and Electric Oven-Broiler
Height 37½" • Width 20⅜" • Depth 23¼"

Counter cooking unit—Choice of two burner units or space saving cluster of 4. • Luxurious satin chrome finish to complement every counter top and cabinet. • Easy to clean. Removable drip pans . . . designed to catch spill-overs.

Dimensions: Gas and Electric Top Cooking Unit
2 burner unit cutout 18½" x 12¼"

Approved by American Gas Association for use with Natural, Manufactured, LP Gas

Write For Full Details: Welbilt-In Division HH
Welbilt Corporation, Maspeth 78, N. Y.

Builder's Models start at $132.50 complete

AMERICA'S LARGEST RANGE SUPPLIER TO THE BUILDING INDUSTRY

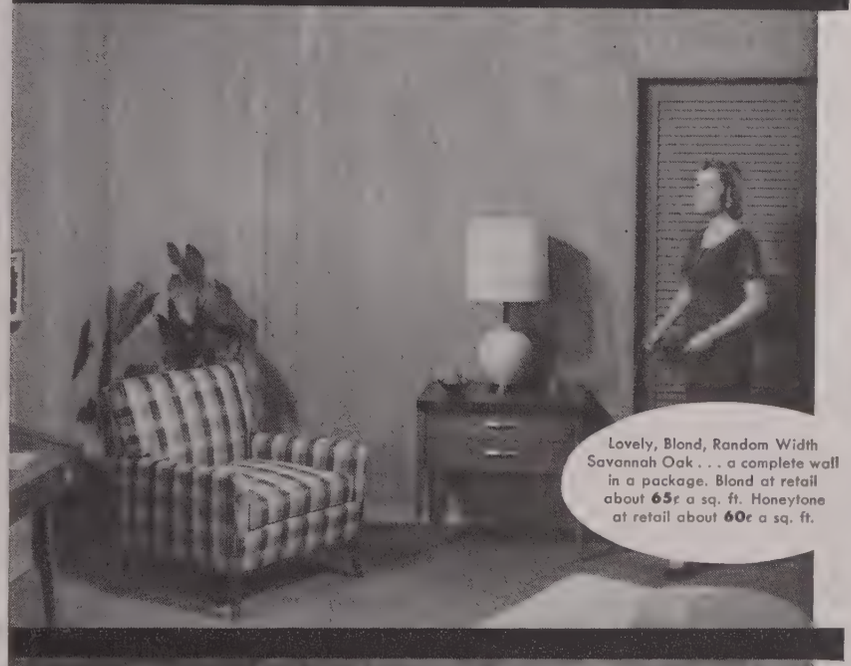
Welbilt CORPORATION

Manufacturers of Welbilt Gas Ranges, Electric Ranges, Air Conditioners
Detroit-Jewel Gas Ranges, Electric Ranges, Gas Incinerators
A-B Gas Ranges, Electric Ranges, Gas Incinerators
Garland Commercial Cooking Equipment

Executive Offices and Eastern Mfg. Div., Maspeth, L. I., N. Y.; Midwest Mfg. Div., Detroit, Michigan



Strikingly Beautiful, V-Grooved Red Gum . . . available for the first time in a prefinished paneling . . . at retail about **48¢** a sq. ft.



Lovely, Blond, Random Width Savannah Oak . . . a complete wall in a package. Blond at retail about **65¢** a sq. ft. Honeytone at retail about **60¢** a sq. ft.



Mellow, Satiny V-Grooved Birch . . . at about **54¢** a sq. ft.

G-P PREFINISHED PANELING a big new SALES SUCCESS FOR BUILDERS!

These magnificent Prefinished V-Grooved wall panelings by Georgia-Pacific give you new beauty . . . new styling that puts *extra eye and buy appeal* into your homes at low cost. Now you can transform ordinary walls into backgrounds of beauty quickly and easily . . . now you can build in *extra value* without increased cost. Look at cost and sales advantages and see for yourself what a selling sensation G-P Hardwood Paneling can be for you.

- Completely prefinished and ready to install—no further finishing or waxing required.
- V-Grooved on the veneer joints to simulate random planking.
- Edges of panels eased for continuous plank effect.
- Back sealed for stability.
- Packaged for panel and surface protection.
- 4 ft. by 8 ft. and 4 ft. by 7 ft. sizes available in ¼-inch thickness.
- Budget-priced all-hardwood panels.
- Big panels go up fast, cost less to install.

GEORGIA—PACIFIC

PLYWOOD COMPANY



What makes one home sell faster than another?

Even though the rest of the house is the same ...a modern convenience like a *KitchenAid* Automatic Dishwasher built into the kitchen will make the difference... bring immediate and enthusiastic approval from house buying prospects. But it will pay you to make sure it's a *KitchenAid*—not just a dishwasher! Only the *KitchenAid* has the exclusive Hobart revolving power washing action that positively removes even the toughest dried-on foods...greases.

Only the *KitchenAid* has the separate motor and blower fan that circulates electrically heated air for clean, quick, sparkling dryness.

The *KitchenAid* front-loading feature and the two independently sliding cushion coated racks give convenience, greatest capacity, quietness and assurance that even the most delicate glassware will be perfectly safe.

The *KitchenAid* is simple to install in any model—undercounter, free standing, sink-dishwasher combination, built-in counter height (illustrated)—whether gravity drain or automatic pump-drain style. The *KitchenAid* undercounter model comes in a variety of beautiful front finishes—Copper, Satin Chrome, White or a color can be arranged to match any kitchen decor.

Try adding a built-in *KitchenAid* Dishwasher to your sales talk; you'll find it a mighty good sales clincher.

KitchenAid Home Dishwasher Div., The Hobart Manufacturing Co., Troy, Ohio. In Canada: 175 George Street, Toronto 2.

KitchenAid®

The Finest Made... by Hobart

The World's Largest Manufacturer of Food, Kitchen and Dishwashing Machines

KitchenAid Home Dishwasher Div.
The Hobart Manufacturing Co., Dept. KHH
Troy, Ohio

□ Please send me literature.

□ Please send name of nearest distributor.

Name.....

Address.....

City.....*Zone*....*State*.....



THEODORE OSMUNDSON, JR. JOHN H. STALEY, JR.

An enviable reputation in the field of landscape architecture has grown around the San Francisco firm of Theodore Osmundsón, Jr., and John H. Staley, Jr., partners since 1946.

GARDEN REDWOOD, because of its beauty and great durability, has been used by them in an imposing list of residential gardens—and equally well in the field of industrial, recreational, and educational landscaping.

Osmundson and Staley are also known for their design of the 1955 California Spring Garden Show... from which a detail is shown below.

Stimulating design ideas for garden structures may be found in the new CRA *Garden Ideas* booklet. Write now for your free copy.

GRADE MARKED • TRADE MARKED

CALIFORNIA REDWOOD

CALIFORNIA REDWOOD ASSOCIATION
576 SACRAMENTO STREET • SAN FRANCISCO 11





Builder Ross W. Cortese uses FOLDOOR as movable partition in typical Frematic Home, Anaheim, Calif.

Frematic Homes Choose Foldoor!

For making homes *sell* faster, you can't beat FOLDOOR by Holcomb & Hoke. These are the folding doors that operate easiest—with 61% less hinge friction. That look better—with exclusive cornice for a "finished" look. And that are sturdy—as proved in thousands of installations. That's why Frematic Homes, Inc. of Anaheim, Calif. chose FOLDOOR by Holcomb & Hoke. That's why, whether you're building one home or 1,000 in 1956, it will pay you to investigate Holcomb & Hoke's line of folding doors. Remember, *only* Holcomb & Hoke makes a *complete* fabric-covered line. Three price ranges for every home . . . a deal for everybody—*a deal for you!*

INSTALLING DISTRIBUTORS IN ALL PRINCIPAL CITIES

In Canada: FOLDOOR OF CANADA, Montreal 26, Quebec

HOLCOMB & HOKE
FOLDOOR
THE SMARTEST THING IN DOORS
®

HOLCOMB & HOKE MFG. CO., INC.
1545 Van Buren St.
Indianapolis, Indiana

Please send full details on FOLDOOR

NAME _____

ADDRESS _____

CITY _____ STATE _____

M

SO HALSTEAD & MITCHELL ENGINEERS SAID...

'WE CAN CUT 95% OFF THE COST OF AIR CONDITIONING COOLING WATER'





Halstead & Mitchell Residential Cooling Towers are engineered to cut 95% from the cost of air conditioning cooling water. This they do by re-using the precious—and expensive—water which without cooling towers would be wasted to the sewer.

So efficient are they that in a recent research project *in Texas* water costs with cooling towers for the five-month summer season were as low as $2.00 *for the entire summer.* That low cost opens the doors wide to water-cooled air conditioning, still the lowest cost system devised. It also means compliance with municipal ordinances aimed at avoiding waste of water.

There's nothing experimental about these units. You are protected by Halstead & Mitchell's exclusive 20-Year Guarantee on the wetted deck surface against rotting or fungus attack . . . and you gain by the many other features which have made Halstead & Mitchell industrial and commercial cooling towers nationally known and respected.

Small in size, and thus easy to hide by proper landscaping, H & M Residential Cooling Towers are built in a complete size range from 2 through 7½ tons. Extra-quiet centrifugal fan units are available for inside installation. You will find them at your nearest leading refrigeration or heating wholesaler.

Write for Bulletin RE-1

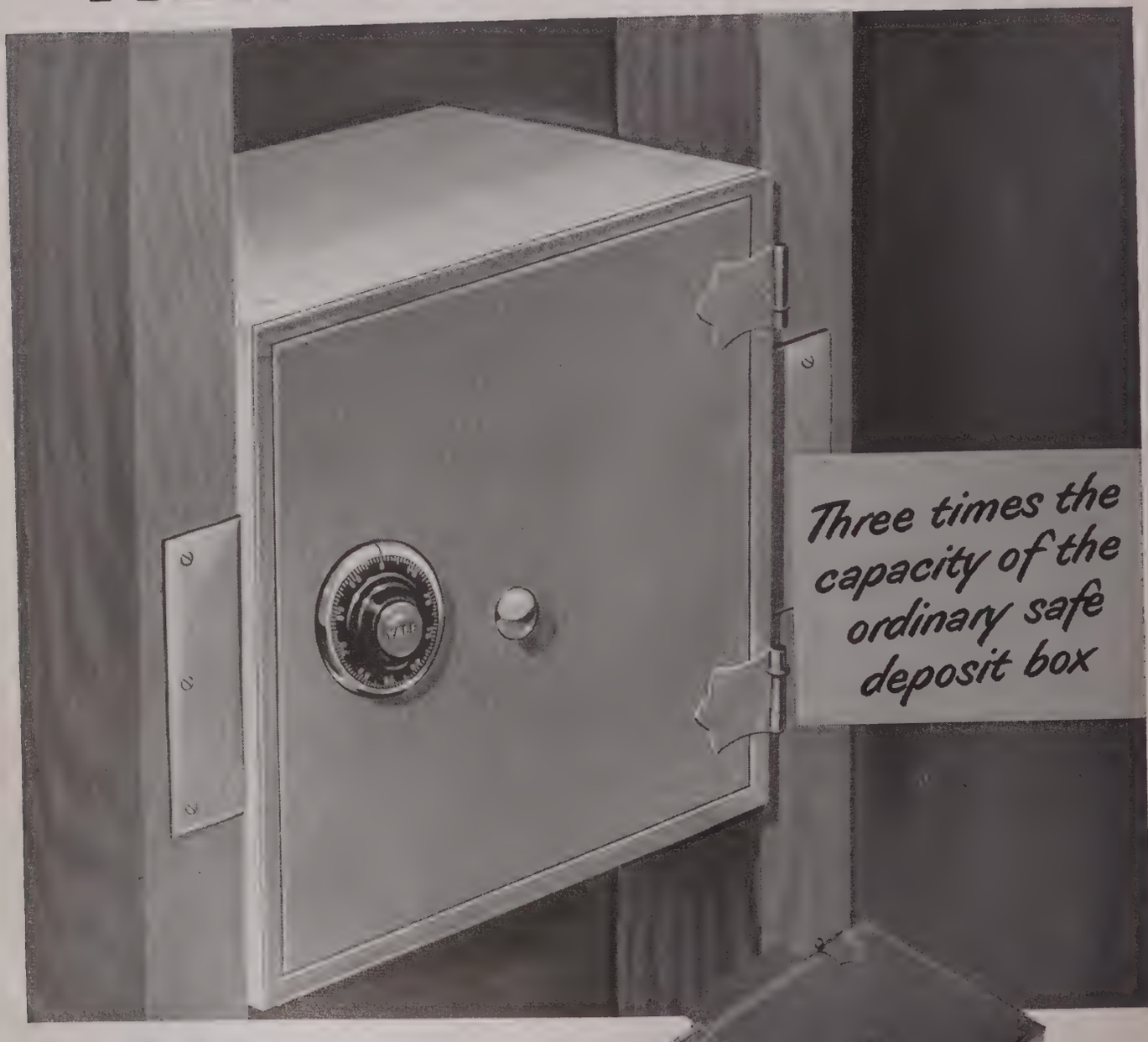
HM

Halstead & Mitchell

BESSEMER BUILDING, PITTSBURGH 22, PA.

YALE* is first again with the only

NEW LOW COST FIRE-



Yale Wall Safe fits between studs

12¾" WIDE, 16" HIGH, 9" DEEP

The mounting flanges simplify installation between standard wall studs. Yale Combination Lock has 10,000 possible settings.

floor safe fits between floor joists

NEW exclusive fabrow

ONE piece Neoprene insulated ventilating sash brings

TRIPLE weather protection!

TRIPLE INSULATED! *beautiful natural wood* **plus Neoprene plus insulating glass give you the tightest weather seal ever. Exclusive with Fabrow Window Wall Frames.**

Only Fabrow Frames with the Roto Ventilator have this new one piece Neoprene weather stripping with molded corners to prevent air infiltration, drafts . . . cut fuel costs.

A money saver in wintertime, summertime, or air conditioned homes.

All Fabrow Frames are designed for standard sizes of both Libbey-Owens-Ford and Pittsburgh Plate insulating glass.

69 modular designs to fit every architectural plan.



WIRE! WRITE! PHONE!
KLondike 9391
TOLEDO, OHIO
for
advance news!

abrow *fashion* **WINDOW WALL FRAMES**

Fabrow Manufacturing, Inc. • 7208 Douglas Road, Toledo, Ohio

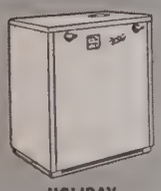


UPSTAIRS

• **BASE-RAY®** Cast-Iron Radiant Baseboard gives the ultimate in beauty, comfort and health. It is hot water heating at its best . . . the evenest heating known. No expansion noises. The original baseboard heating.

Choose ALL-BURNHAM heating for *beauty, comfort* and *health!*

DOWNSTAIRS



HOLIDAY



PACEMAKER



PACE-PAK

For every requirement there's a Burnham heating system to give the comfort and service that makes satisfied home owners! Team BASE-RAY with any of these Burnham boilers for automatic hot water heating. Behind them are 80 years of know-how. All feature vertical flue travel and low draft loss. All are lifetime cast iron. They can easily be equipped for year 'round automatic domestic hot water. Get ratings and full data . . . mail the coupon today!

- **HOLIDAY®** Gas Boiler gets the best from gas . . . it's the newest, most efficient gas boiler on the market.
- **PACEMAKER®** designed exclusively for oil-firing and a real fuel miser.
- **PACE-PAK®**— Pre-assembled and packaged oil heating unit. All equipment factory installed and tested. Gives optimum performance with minimum service.

Burnham Corporation

BOILER DIVISION • IRVINGTON, N.Y.
FIRST in the Manufacture of Baseboard Heating



BURNHAM PRODUCTS WEAR LIKE IRON BECAUSE THEY'RE MADE OF IRON

HH-66

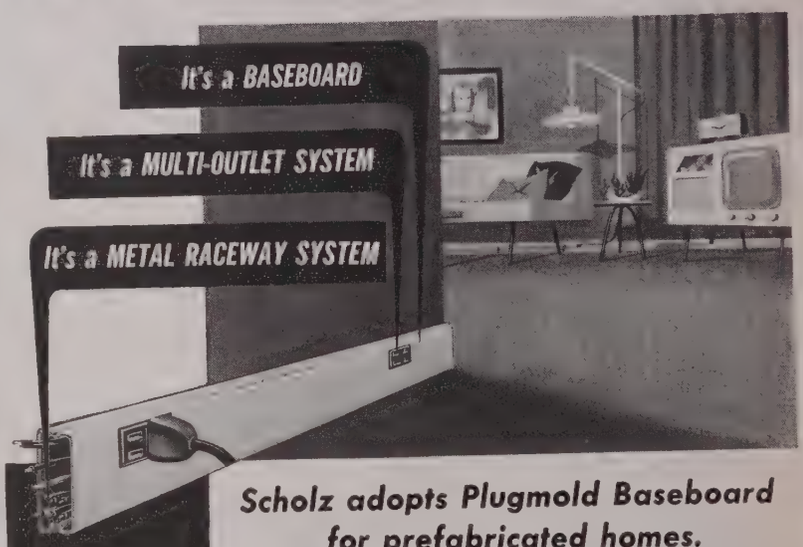
Burnham Corporation
Irvington, New York
Please give me full data and ratings on
☐ BASE-RAY ☐ HOLIDAY
☐ PACEMAKER ☐ PACE-PAK
Name .....
Address .....
City ..... State .....

NEW

The BIG NEW IDEA in house wiring

3-in-1

PLUGMOLD BASEBOARD



Simplifies home wiring

Gives homes a big selling feature

Keeps homes electrically modern

OPERATION HOME IMPROVEMENT — 56-the year to FIX

Scholz adopts Plugmold Baseboard for prefabricated homes.



DON SCHOLZ, Scholz Homes, Inc., Toledo, says:
"2200 Plugmold Baseboard does the job . . . and stays within my construction budget. I like the way it looks and the convenience it adds to our homes."

2200 Plugmold Baseboard is the modern, economical, *practical* way to wire *all* homes. It is a combination multi-outlet system, wiring raceway and steel baseboard, *all three in one.* It *simplifies* house wiring, *reduces* your wiring costs and *gives* your homes a big *extra* selling feature.

2200 Plugmold Baseboard eliminates middle-of-the-wall outlets . . . supplies duplex outlets *neatly* within the baseboard every 30" or 60" apart. Raceway has maximum capacity of 10 No. 10 or 3 No. 6 conductors.

2200 Plugmold Baseboard meets *all* NEC Requirements and is listed by Underwriters' Laboratories, Inc.

THE WIREMOLD COMPANY
HARTFORD 10, CONNECTICUT







SIMPLY SLIP THE HALVES TOGETHER
IN THE OPENING AND NAIL IT TO THE WALL

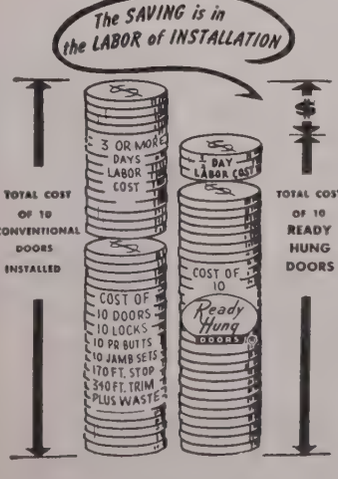
IT'S DONE IN 20 MINUTES!

Ready Hung DOORS®

PAT. NO. 2489029

REDUCES FINISH CARPENTRY COST 65%!

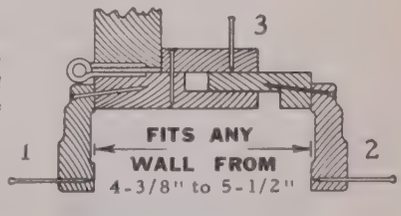
COMPARE COSTS
ON A HOUSE WITH 10 DOORS



On a house with 10 doors . . . Ready Hung Doors* will

ELIMINATE — Sawing one or both ends of **120** pieces of lumber
ELIMINATE — — — — Planing one or both edges of **10** doors
ELIMINATE — — — — — — — — — — Boring **30** holes
ELIMINATE — — — — — — — Cutting **40** hinge mortises
ELIMINATE — — — — — — — Cutting **20** lock mortises
ELIMINATE — — — — — — — — Cutting **80** trim mitres
ELIMINATE — — — — — — — — Cutting **40** stop mitres
ELIMINATE — — — — — — — Driving **350** to **500** nails
ELIMINATE — — — — — — — — — Driving **160** screws

Simply slip the halves together in the opening and drive nails at 1, 2 and 3! There is nothing to saw, plane, bore or mortise!



READY HUNG DOORS CAN SAVE *You* THOUSANDS OF DOLLARS A YEAR!

**Trade Mark Registered*

CALL YOUR LUMBER DEALER • READY HUNG DOORS MADE BY THESE LEADING WHOLESALERS

ALBANY, N. Y.
Iroquois Millwork Corp.
BALTIMORE, MD.
Central Building Supply, Inc.
BIRMINGHAM, ALA.
National Woodworks, Inc.
BOSTON, MASS.
A. W. Hastings & Co., Inc.
Sommerville 44, Mass.
BUFFALO, N. Y.
The Whitmer-Jackson Co., Inc.
CINCINNATI, OHIO
Acme Sash & Door Co.
CLEVELAND, OHIO
The Whitmer-Jackson Co.
Massillion, Ohio
DAYTON, OHIO
Dayton Sash & Door Co.
DENVER, COLO.
Lumber Dealers, Inc.
GRAND RAPIDS, MICH.
Haskelite Mfg. Corp.
HOUSTON, TEXAS
Southwest Sash & Door Co.
INDIANAPOLIS, IND.
Midland Building Industries, Inc.
LOS ANGELES, CALIF.
Ready Hung Door Mfg. Co.
Burbank
MARION, IND.
General Millwork Corp.
NEW YORK, N. Y.
Bailey-Whalen Co.
West Orange, N. J.
OAKLAND, CALIF.
Ready Hung Door Mfg. Co.
PITTSBURGH, PENN.
Iron City Sash & Door Co.
ROCHESTER, N. Y.
The Whitmer-Jackson Co., Inc.
SAN ANTONIO, TEXAS
Ready Hung Door Mfg. Co.
SEATTLE, WASH.
Acme Millwork, Inc.
Kirkland, Wash.
SIOUX FALLS, S. DAK.
Jordan Millwork Co.
ST. LOUIS, MISSOURI
Imse-Schilling Sash & Door Co.
ST. PAUL, MINNESOTA
Minnesota Wood Specialties, Inc.
SYRACUSE, N. Y.
Iroquois Door Co.
TORONTO, CANADA
C Lloyd & Son Limited
WACO, TEXAS
Frank Stevens Sash & Door Co.

READY HUNG DOOR CORP., FORT WORTH 2, TEXAS

WEISWAY...
the easy way to a second bath!



THERE'S no doubt that the words "two baths" add considerable selling oomph to any builder's home.

Space and cost are probably the first objections that come to mind. But, consider a Weisway cabinet shower for the second bath.

Even the most luxurious of the Weisway line is not "expensive." And all models, even the lowest priced, are made to uphold the integrity of this fine old name. There are 24 glamorous colors from which to choose.

Then, too, a Weisway cabinet shower can be fitted into almost unbelievably small floor space . . . as little as 32" x 32".

Why not call in your Weisway representative and talk it over? Or send coupon for illustrated catalog.



WEIS

Built-in and cabinet showers in 24 glamorous colors. Also, vitreous enamel and terrazzo receptors for tiled showers.

SEND FOR FREE CATALOG!

Henry Weis Manufacturing Co., Inc.
696 Weisway Building, Elkhart, Indiana

Please send free descriptive catalog of Weis cabinet showers. We are interested in new building_____, remodeling_____.

NAME_____

ADDRESS_____

CITY, STATE_____

☐ Please send name of representative.



Revco Bilt-In Refrigerators and Freezers open a new world of design and color possibilities for both new and remodeled kitchens. Revco Bilt-Ins—the first truly built in refrigeration products—have been tested and proved in tens of thousands of fine homes throughout the country during the past two years.

Leading architects have found that only Revco Bilt-Ins satisfy the basic requirements of built-in appliances.

- **True built-in concept**
- **Proved, trouble-free performance**
- **Five-year warranty on complete refrigeration system**
- **More than adequate food storage capacity**
- **Stainless Steel or Antique Copper finish**
- **25 custom colors**
- **Easy to install**
- **Choice of location and arrangement**
- **Built to fit standard cabinet dimensions**

Get the full Revco story today and have the information readily available for your clients—right in your file. Revco has prepared a special architects file with all of the information you will need on built-in refrigeration. Send the coupon below for your *free* copy of this complete information kit.

REVCO

SPECIALISTS IN REFRIGERATION • DEERFIELD, MICHIGAN

REVCO, INC., Dept. HH66
Deerfield, Michigan



Please send me my free architects information file on Revco Bilt-Ins.

Name_____

Office address_____

City_____ Zone____

State_____

You get much more with

ACCORDOFOLD

FOLDING DOORS & ROOM DIVIDERS





MATCHING DECORATIVE CORNICE

Smartly conceals track and linkage. Gives Accordofold a streamlined, framed, "finished" appearance, with no mechanical parts showing.



XCLUSIVE "CLOSE-LOOK" LATCH

ccordofold closes at the touch of a nger . . . then locks firmly for privacy t the touch of a lever!

. . . . covered in fashon VINYL MATERIAL

Fashon is produced in a wide selection of colorful patterns and leather effects to harmonize with any interior . . . it will fold and flex for years without cracking . . . dirt, grease and grime wash off with just a soapy cloth . . . and it won't support combustion! All the advantages of Fashon are yours in versatile Accordofold folding doors. Accordofold's 21 stock sizes fit virtually all openings. They save space, create space. On every score, Fashon-covered Accordofold is "The Folding Door That Gives You More!"

THE GENERAL TIRE & RUBBER COMPANY
JEANNETTE DIVISION • JEANNETTE, PENNA.

GENERAL PLASTICS

SEND COUPON TODAY!

Get complete Accordofold price lists and specifications . . . add eye-catching sales appeal to the homes you build at low cost . . . mail this coupon NOW!

DESIRABLE TERRITORIES AVAILABLE TO FRANCHISED DEALERS AND DISTRIBUTORS

AMERICAN BAMBOO CORPORATION, Dept. XX-1
171-04 Jamaica Ave., Jamaica 32, N. Y.

Please send me complete information on ACCORDOFOLD folding doors and room dividers:

Name & Title_____

Firm_____

Address_____

City_____ Zone____ State_____

NEW

HAR-VEY

SLIDING DOOR

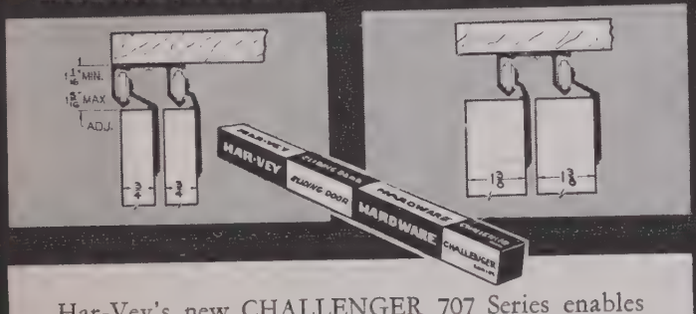
HARDWARE

cuts your costs and your inventory

. . . yet it's GUARANTEED to be the smoothest, quietest you ever used!

Now one packaged set fits both 3/4" doors and 1 3/8" doors

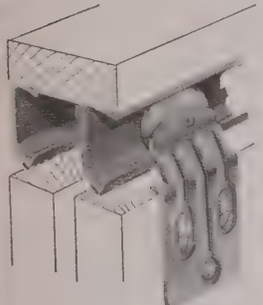
The simple reversing of Hangers between outer and inner doors shown below permits *one* set to accommodate *either* size doors.



Har-Vey's new CHALLENGER 707 Series enables you to give home-buyers the *same famous Har-Vey quality* at a new low cost—and *you* reduce handling by using just *one* packaged set for both 3/4" and 1 3/8" sliding doors!

GUARANTEED SMOOTH OPERATION

—proved by your own comparison test! You can't lose. Just install Har-Vey in your next home, and see for yourself how smoothly and quietly it works. If the Har-Vey Hardware in your test home is not the smoothest, quietest sliding door hardware you've used in that price range—you get *double* your money back!



- Self-lubricating oilite bearings keep doors sliding smoothly for years—without maintenance
- Nylon rollers last a lifetime
- *Aluminum* V-grooved track can't rust!

New Challenger 707 Series

LIST PRICES

C-707-4 for two 2'–0" doors	**4.87** Set
C-707-5 for two 2'–6" doors	**5.56** Set
C-707-6 for two 3'–0" doors	**6.25** Set
C-707-8 for two 4'–0" doors	**8.32** Set

—includes 4 hangers, aluminum track, nylon door guide and 2 flush pulls

Ask your dealer, or write us for complete details.
Department H6

QUALITY HOMESHIELD PRODUCTS

AMERICAN SCREEN PRODUCTS COMPANY

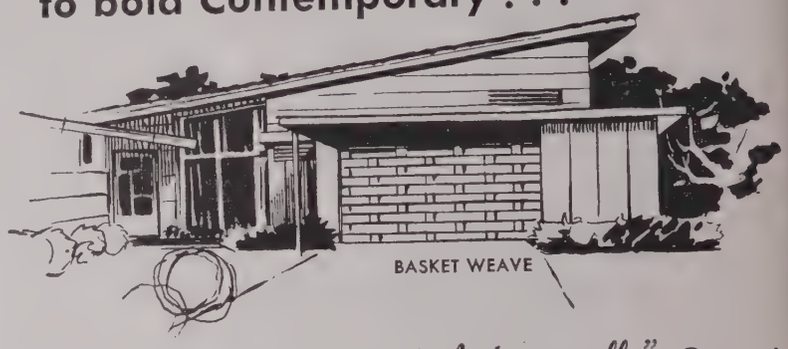
GENERAL OFFICES: 807 N.W. 20th St., Miami, Fla.
Factories: California, Texas, Illinois, Indiana, Florida

From picturesque Early American...



CAPE COD

to bold Contemporary . . .

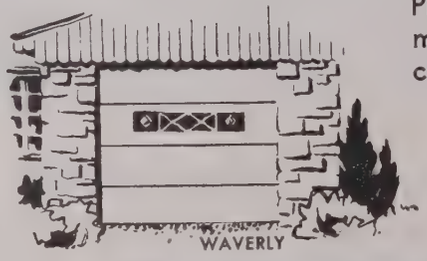


BASKET WEAVE

Graham

"Architecturally" Correct sectional GARAGE DOORS

Add the "Finishing Touch" of Beauty . . . Individuality and Custom Design . . . Plus perpetually trouble-free mechanism — at no extra cost.

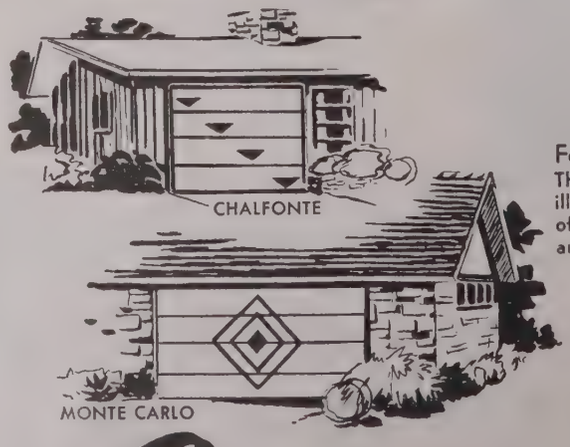


WAVERLY



WINDSOR

Qualified distributors being selected in certain areas

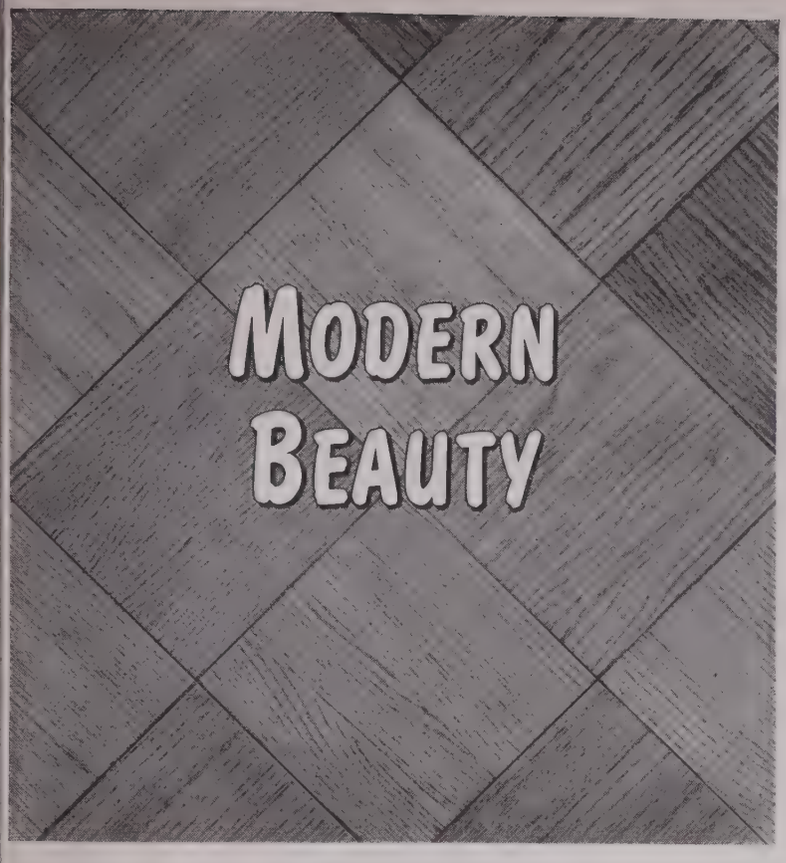


CHALFONTE

MONTE CARLO

For Your File *
The "New Ideas" brochure illustrates the importance of garage doors in today's architecture.

GRAHAM industries, inc.
263 N. Washington Dr., St. Armands Key, Sarasota, Florida



BRUCE BLOCK FLOOR

For complete information, see our catalog in Sweet's or write E. L. Bruce Co., Memphis 1, Tenn.

For the women in *professional* your life!

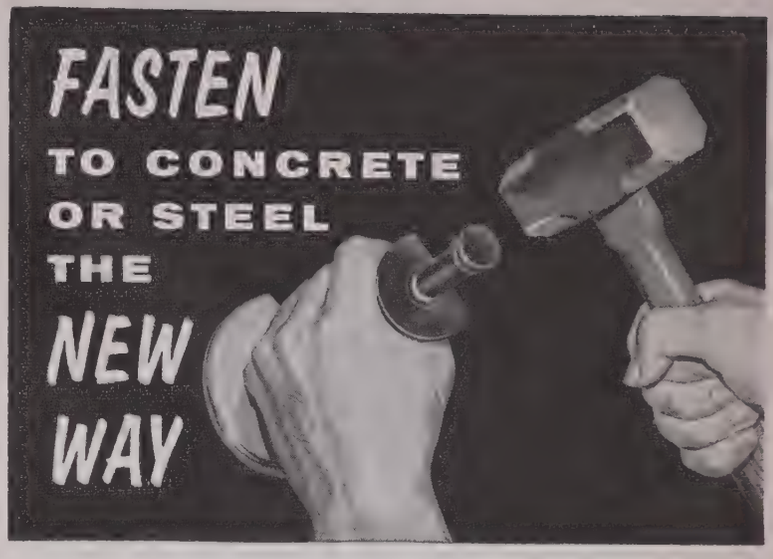


Women like *style* in the kitchen—and they get it, full measure, in these beautiful Curtis natural birch kitchen cabinets. Even more, they like *woman-designed* utility—and these units are right for a woman's reach, for a woman's way of working. Shelves revolve...slide forward ...swing in and out...are adjustable to put everything right into their fair hands. Curtis birch cabinets fit any size or shape of kitchen and are sold by leading lumber and building materials dealers everywhere. For complete information, write Curtis Companies Service Bureau, Clinton, Iowa.

CURTIS WOODWORK

heart of the home

1866 CURTIS WOODWORK



WITH

Shure-Set

PATENTS PENDING

—THE HAMMER-IN FASTENING METHOD

WOOD TO MASONRY
shelves
paneling
partitions

WOOD TO STEEL
furring strips
signboards
panel boards

STEEL TO STEEL
wire mesh
window guards
pipe straps

STEEL TO CONCRETE
conduit
clips
downspouts

Where nails fail and Ramset® is not required, SHURE-SET fills the bill. It's the in-between tool that handles countless jobs better than concrete nails or drilling.

Here's a new fastening tool, essential to everyone who works with concrete or steel! Just pick up a hammer and your SHURE-SET KIT and you can fasten into cement block, masonry, ¼" steel, mortar joints and other hard materials.

SHURE-SET supports and guides the fastener straight and true with pin-point accuracy. No bending, buckling, bouncing—fasteners sink into hard materials as if by magic!

Uses no outside power; just makes your hammer power more effective. It's a "must" tool for every carpenter, electrician, plumber or builder of any kind. Especially valuable where Ramset may be too powerful.

Ask your supplier. SHURE-SET gives you a real advantage over old-style methods. Get the jump on your competition. Write now for full details.



COMPLETE KIT
contains everything you need

Ramset is the original powder-actuated method for heavy-duty fastening.

Shure-Set ...BY THE MAKERS OF *Ramset*®
RAMSET FASTENING SYSTEM · WINCHESTER-WESTERN DIVISION
OLIN MATHIESON CHEMICAL CORPORATION

12161-F BEREA ROAD • CLEVELAND 11, OHIO



- **FASTER TO INSTALL**
- **REMOVABLE FOR MAINTENANCE**
- **POSITIVE, SECURE CLOSURE**
- **EASIER ACCESS TO UNDER-FLOOR SPACE**

Designed for builder and user satisfaction . . . Donley Crawl Space Doors are low in cost, easy to install and attractive in appearance. These units lock in place with screw-operated catches but can be completely removed for easy access to under-floor space. Frame is anchored in brick or concrete-block wall by projecting flanges.

These features . . . as on all Donley Products for the builder . . . are the result of design and fabrication experience extending over forty years. Donley's reputation for quality . . . backed by consistent national advertising . . . eases the job of selling for the dealer. The results . . . when you stock the Donley Line . . . are *more sales* and *greater profits.*

No.	Door Width	Door Height	Masonry Opening	Ship. Wt.
1	30⅛	12½	32x14¾	16 lbs.
2	30⅛	16½	32x18¾	19 lbs.



Write today for information on the complete line of Donley Metal Building Products.

6874-DB

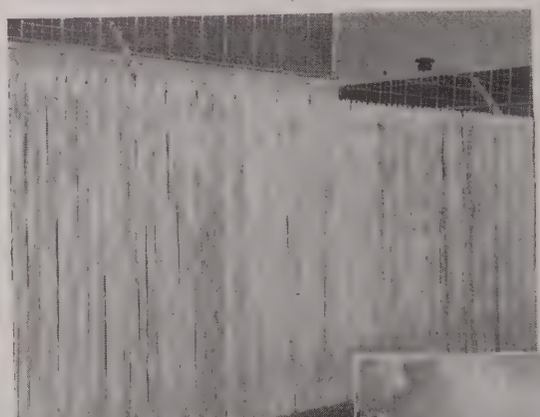
THE Donley BROTHERS COMPANY

13981 MILES AVENUE • CLEVELAND 5, OHIO

a **big plus** factor that sells houses . . . **HABITANT** factory fabricated **wood fence**



The attractive "extra touch", the air of privacy and luxury that adds so much to the salability of any house, can be achieved easily with handsome Habitant Fence. You can use Habitant Fence in any manner you wish . . . for surrounding whole yards, or in limited segments as outdoor room-dividers. It's an ideal means of setting off patios, breezeways, house fronts. Habitant Fence is factory-fabricated to the exact ground plan and comes complete with gates and all hardware.





Habitant Fence around industrial buildings looks friendly and attractive . . . improves public relations. Surely too, the fence serves an important protective purpose ...a firm barrier against intruders.

Shown here with extension arms and barbed wire, Habitant Fence is both a great landscaping and utilitarian asset.

Shown here is a highly successful Habitant installation around an outdoor exhibition. Drive-in theatres, shopping centers, schools, airports, municipal properties, and many other sites can also make excellent use of cut-to-fit Habitant Fence.

In some selected areas, Habitant Fence dealer representation is still available . . . if you are interested, write for details.

Habitant FENCE Inc.

BAY CITY 17, MICHIGAN

189



THE BIGGEST OPPORTUNITY IN 11 Western States

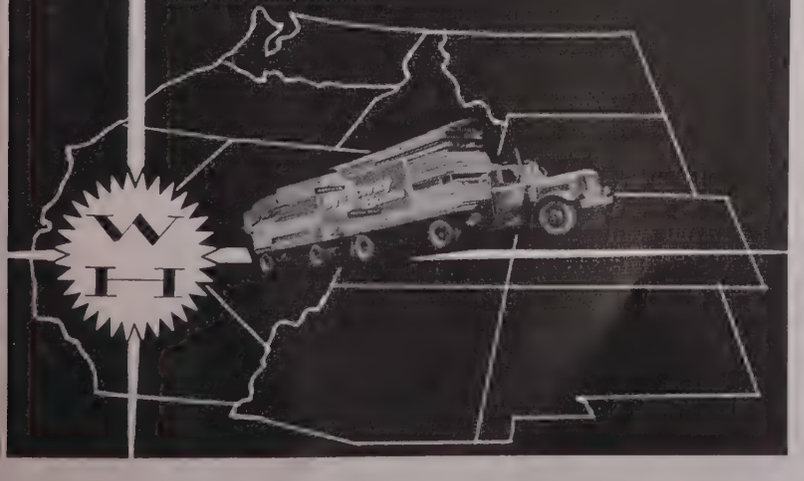
The Westway Homes Builder-Dealer program offers you more than just a packaged house—It is an entirely new and proven concept of building and selling. You get firm building costs, well-planned promotional backing, speedy construction, FHA and VA loan assistance, color styling, plot planning, and many other features as a Westway Builder-Dealer.

Our Westway line of factory-built homes feature the latest in California contemporary styling, harmonious and eye-catching color combinations, a variety of roof textures, choice of exterior sidings, floor-to-ceiling glass panels. All this—plus easy financing for these modern homes—means sure sales and profits for Westway distributors in 1956!

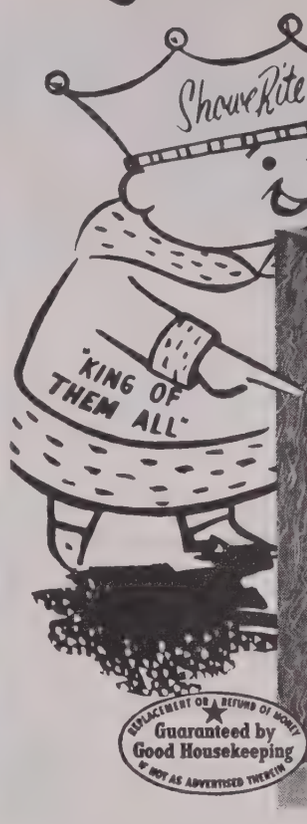
Why not take advantage of building with Westway in your area?

westway homes, inc.

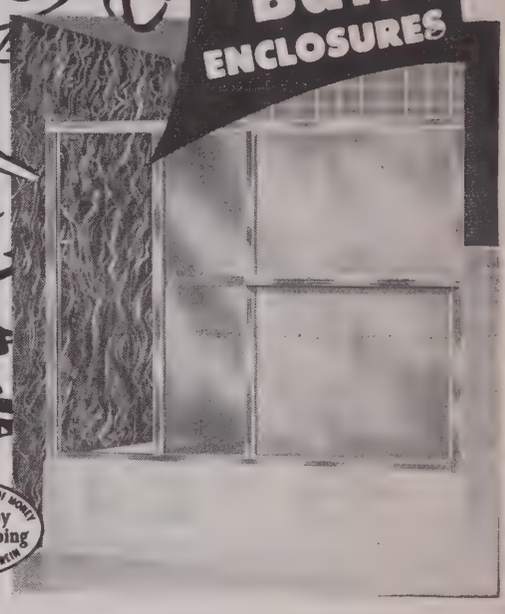
Write, wire or phone—Westway Homes, Inc., Dept. 2, 4300 El Camino Real, Los Altos, California



ShoweRite® gives YOU THE WORLD'S BIGGEST PROFITS with . . .



Glass Bath ENCLOSURES



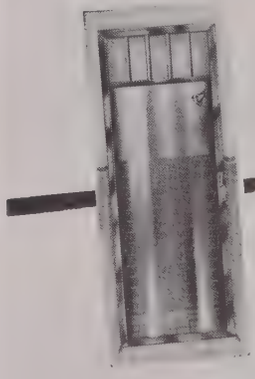
REPLACEMENT OR A REFUND OF MONEY
Guaranteed by Good Housekeeping
IF NOT AS ADVERTISED THEREIN

STANDARD SHOWERITE ENCLOSURE

For 4½' or 5' Tub, Suggested Retail Price **$69.95**

For 5½' Tub, Suggested Retail Price **$79.95**

Sand blast designs available for Tub Enclosures in handsome Swan, Fish or Sea Horse Designs.



NEW FEATURES AT NO EXTRA COST

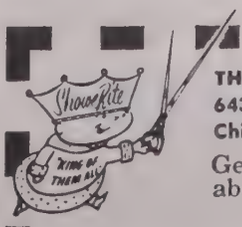
- ★ 2 Extruded Aluminum Towel Bars, One Inside . . . One Out
- ★ NEW Noise-Proof Door Slide CHANNEL
- ★ NYLON Rollers—Operate Easily & Quietly on Top Track
- ★ NEW Deeper Bottom Guide Track

SHOWER DOORS . . .

Completely assembled, hammered frosted glass for easy installation. Continuous piano hinge, drip moulding, with every unit. Easy-to-grip handle. For 24" to 26" openings. Suggested Retail Price **$39.95**

Model Illustrated with grill top Suggested Retail Price **$49.95**

Your Profits Are Greater With ShoweRite. Send for Complete Facts TODAY.



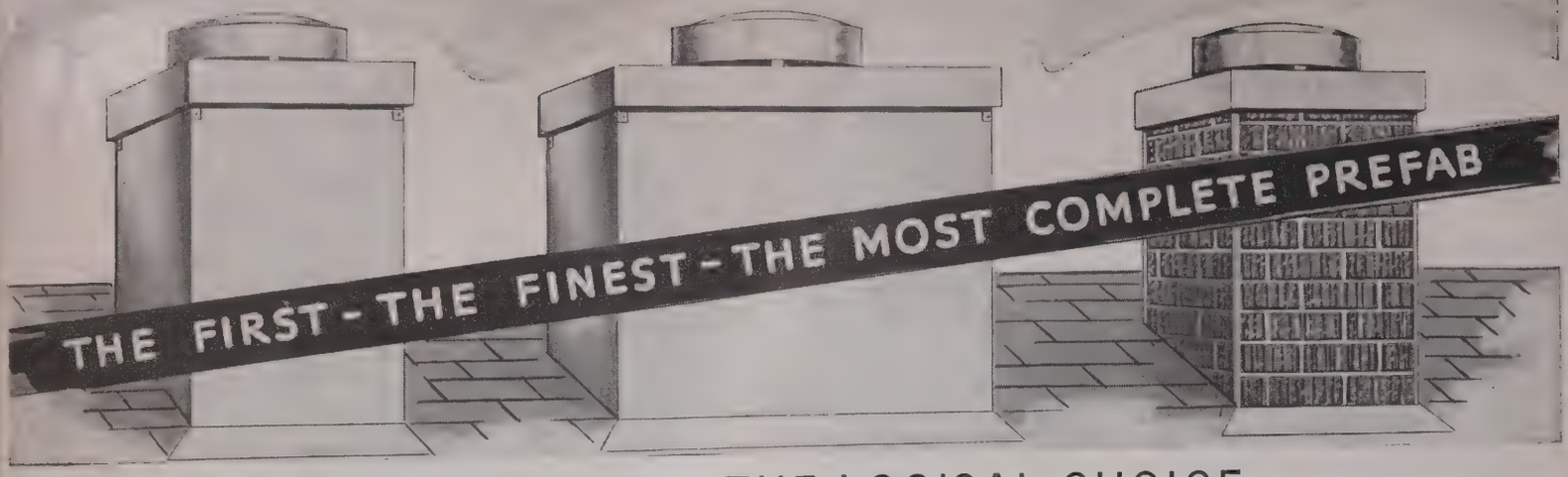
THEODORE EFRON MFG. CO.
6434 S. Wentworth Ave.
Chicago 21, Illinois Dept. HH-556

Gentlemen: Please rush me information about ShoweRite products.

Name _____

Address _____

City _____ Zone ___ State _____



VITROLINER CHIMNEYS — THE LOGICAL CHOICE

The Architect has flexibility and choice. He can specify 2 types "E" and "L" for ceiling and basement installations—3 Designs, as illustrated above —5 Diameters (6", 7", 8", 10" and 12") for correct size—UL listed for 4 Fuels—oil, gas, coal and wood.

The Builder prefers lightweight Vitroliner (10 to 15 lbs. per ft.) which is easy to handle and quick to assemble.

The Home Owner enjoys a neat modern design. His Vitroliner adds distinction to the appearance of his home. He also enjoys the safety and long life VITROLINER provides.

Vitroliner is not only the first and Pioneer Chimney but still the finest quality-built class "A" Chimney on the market for one and two story homes and buildings using all fuels.

Of course, Vitroliner provides complete chimney functions, venting combustion gases from Heating Plant, Water Heater and Incinerator.

NATIONALLY ACCEPTED

Listed by Underwriters Laboratories—accepted by Local and State Building Authorities — Insurance Rating Bureaus—and the Building Officials Conference of America.

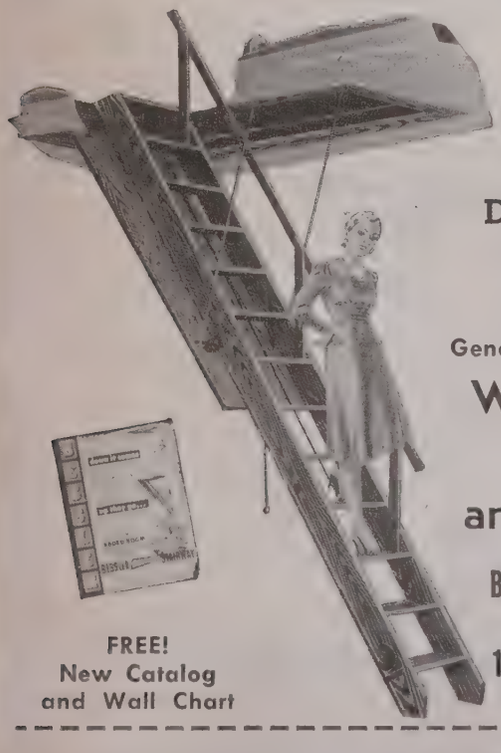


For fast quotation, send us "X", "Y" dimensions and flue diameter.

Investigate this low cost, quality chimney—write for literature today.

CONDENSATION ENGINEERING CORPORATION
3511 W. POTOMAC AVE., CHICAGO 51, ILL.

THE ONLY COMPLETE DISAPPEARING STAIRWAY LINE!



BESSLER DISAPPEARING STAIRWAYS

Generous Trade Discounts!

Write for Free Catalog and Wall Chart

BESSLER DISAPPEARING STAIRWAY CO.
1900-E East Market St.
Akron 5, Ohio

FREE!
New Catalog and Wall Chart

Bessler Disappearing Stairway Co., 1900-E East Market St., Akron 5, Ohio
Please send free Catalog, Wall Chart, Prices and Discounts.

Name ..... Address .....
City ..... Zone..... State .....

Homes Wired for Tomorrow... are Wired for TV" with ..

Mosley

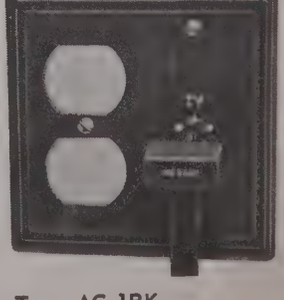
Television Lead-in Wall Plate Sockets

Tomorrow's Homes are here today, when wired with MOSLEY AC/TV Wall Plate Sockets. Color television *demands* a good roof-top or attic antenna and MOSLEY Outlets permit plug-in connection of TV set to antenna in *any* room . . .

. . . in *any* home!

• Low Cost! • Easy to install to meet electrical codes! • Harmonizes with existing wall plates!

You owe it to your clients to show them the MOSLEY Wall Plate Sockets...



Type AC-1PK.
List Price $1.87

Single TV socket for one antenna lead-in & matching plate for double convenience outlet. Complete with TV plug. In brown or ivory. Other types also.

Available from coast-to-coast. Write for name of nearest supplier.

Say you saw catalog in S or write for copy

32c/8i Mo

Mosley Electronics, Inc.
8622 ST. CHARLES ROCK ROAD, ST. LOUIS 14, MISSOURI

These days... more than ever...

QUALITY + BEAUTY = BUYER APPEAL



BUYERS KNOW

Sta-Dri

IS QUALITY

- **MASONRY PAINT • CLEAR-COAT**
- **ACRYLICOTE all purpose paint**
- **LINK • SPECIAL PRIMER • WATER-STOP**

Modern builders in tune with contemporary design advantages and buyer desires know that successful building is possible only with up-to-date materials and techniques. Today's builders know today's buyers want the advantages and quality made possible by recent technological advances. Successful builders know that in a more competitive market with more selective buyers, profits lie in using the quality and economy of the technological advance.

Sta-Dri paints, masonry finishes and surface treatments were developed, are produced and marketed as a result of knowledge of the best material performances of the past plus creative formulation for even greater performance. Sta-Dri building products are quality first. They produce more lasting results, make it possible to drop old wasteful methods, and offer faster, more economical techniques.

Sta-Dri Masonry Paint is the standard for beauty and protection against water by which others are judged. Sta-Dri Link makes plastering fast and economical because it permanently bonds finish plaster to any surface. Sta-Dri Clear-Coat saves the natural beauty of masonry, but keeps water out and prevents efflorescence. The latest Sta-Dri development, Acrylicote, gives the building industry the most perfect paint yet, a non-fading, non-toxic, odorless, fast drying, washable, durable paint for both interior and exterior. Ask your local supplier for specifications and details or write to:

American Sta-Dri Company
Brentwood, Maryland

NOW—a complete line of quality decorator paints for interior and exterior use that is highly fire retardant

FI-RE-SIST

Fi-Re-Sist meets and exceeds all the requirements contained in Federal Specs SS-A-118a (toughest fire test), TT-P-26a (toughest painting test for painting and fire retardant qualities) and Air Force Regulation 89-8 (the latest Government Criteria for painting and fire retardance). It is a fine oil and alkyd base paint that is fire retardant and smoke preventive on any surface where conventional paint is used.

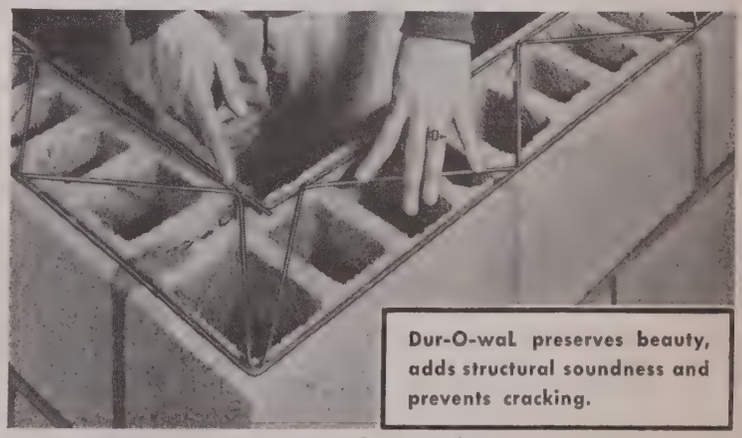
Fi-Re-Sist has these additional features:

- **LOW ODOR • NON-TOXIC • WASHABLE**
- **APPLIES WITH BRUSH, ROLLER OR SPRAY**
- **PROTECTS UNDER SURFACE FROM FLAMES**

Available in flat, semi-gloss and gloss in white, tints and deep tones. Also in non-yellowing gloss enamel.

Write today for complete information and test results conducted by an independent testing laboratory.

S. K. Laboratories, Inc.
1800 Cherry Hill Road, Baltimore 30, Maryland



Dur-O-waL preserves beauty, adds structural soundness and prevents cracking.

Trussed Design
Butt Weld • Deformed Rods

DUR-O-WAL®

Phone, wire or write Dept. 2D today for complete dealer information . . . . you have a market for Dur-O-waL in your town. Act now.

Dur-O-waL Div., Cedar Rapids Block Co., **CEDAR RAPIDS, IA.** Dur-O-waL Prod., Inc., Box 628, **SYRACUSE, N.Y.** Dur-O-waL of Ill., 119 N. River St., **AURORA, ILL.** Dur-O-waL Prod. of Ala., Inc., Box 5446, **BIRMINGHAM, ALA.** Dur-O-waL Prod., Inc., 4500 E. Lombard St., **BALTIMORE, MD.** Dur-O-waL Div., Frontier Mfg. Co., Box 49, **PHOENIX, ARIZ.** Dur-O-waL, Inc., 165 Utah St., **TOLEDO, OHIO**

The Modern Decorative Flair . . .

GENUINE LEATHER TILES . . . . . equally suitable for FLOORS and WALLS, in Durable, Natural PIGSKIN



GALLERIES OF THE GRAND RAPIDS FURNITURE MAKERS GUILD

Send for colorful brochure and free sample

PIGSKIN by Kiefer

KIEFER TANNERIES
252 Front Avenue, S.W.
Grand Rapids, Michigan



Modern style . . . lasting beauty . . . dependable service characterize Gerber bathrooms. All fixtures—lavatory, closet, tub, brass—above are Gerber. Gerber offers 5 colors: lagoon green, waterfall blue, sunset tan, stainless white and new petal pink.

How to build more bathroom appeal into your homes at no extra cost!

High quality, moderate price of Gerber Plumbing Fixtures lets you add extra bathroom appeal without increasing costs — 1½ baths instead of 1, colored fixtures instead of white, 2 lavatories instead of 1, full size tub instead of a "miniature" — are a few examples.

Gerber's complete line gives you a complete "packaged" bathroom from one source — a bathroom in which all fixtures harmonize perfectly, install economically. All fixtures delivered direct to your job site in one truck from a conveniently located Gerber plant.

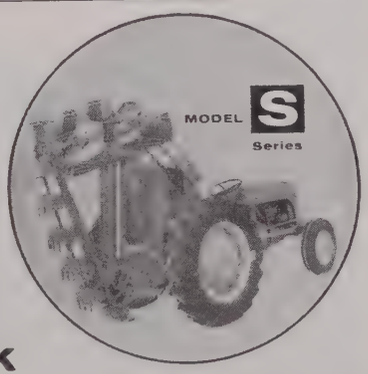


Free Booklet
Send today for special builder booklet, "How to build more bathroom appeal into your homes."

Guaranteed by Good Housekeeping

GERBER
Plumbing Fixtures
Gerber Plumbing Fixtures Corp.
232 N. Clark St., Chicago 1, Ill.

The Everett® Trencher



equals the work of 25 pick and shovel men!

Engineered and designed for the great new FORD and FERGUSON (as well as MASSEY-HARRIS MH-50) TRACTORS.

The Everett Trencher cuts clean straight trenches up to 42" deep, 12" to 18" in width. It operates from the power take-off of the tractor—raised and lowered by built-in hydraulic system. Quickly installed. A "V" belt safety slip feature is built into the drive of the trencher which automatically stops the bucket line and prevents damage when obstructions are encountered.

Note these advantages:

- **NEW built-in Rock Guard**
- **NEW single wheel design gives faster penetration**
- **NEW "V" Power Drive with V Belt Safety drive**
- **NEW easily accessible controls**



THE EVERETT® TRENCHER MODEL 60 DIGS TRENCHES UP TO 5' DEEP AT LESS THAN HALF THE COST OF COMPARABLE MACHINERY.

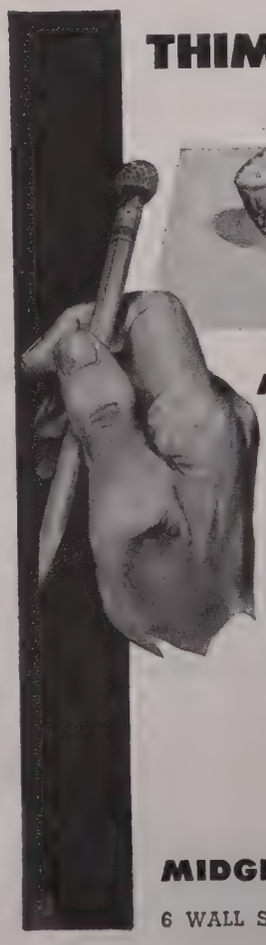
The Model 60 will do a big digging job at a sensible price. Hydraulically operated it will dig close to buildings, pipes, etc.

Another Great EEC® Product

EARTH EQUIPMENT CORP.,
2036 Sacramento St., Los Angeles 21, Calif.
Please send full information on:
☐ Model S Series Everett Trencher
☐ Model 60 Everett Trencher HH-6
NAME_____
COMPANY_____
ADDRESS_____
CITY_____ ZONE____ STATE_____

THIMBLE MAGIC . . .





A New Kind of Louver

. . . the *Midget Thimble* lets air into places no other louver can reach, protects paint, wood and metal from excess heat and moisture.

Thimble Louvers are always used with regular Midget Louvers, feature same easy push-in installation, hold securely without nails or screws. Perforated design is insectproof, won't clog when painted.

Midget Louver's standard line now offers chrome, anodized, copper, and aluminum in 1, 1½, 2, 2½, 3, 4, and 6 inch sizes.

Write for full information on humidity control—

MIDGET LOUVER COMPANY

6 WALL STREET • NORWALK, CONNECTICUT.

memo to Builders

If you're interested in bigger profits, get this FREE BOOKLET "How To Cut Chimney Costs"— gives you the latest job-tested ways to build chimneys faster, use less labor, make more money. Write Today!

GENERAL PRODUCTS COMPANY, INC.
FREDERICKSBURG, VA.
Manufacturers of AIR JET® "The Last Word in Packaged Chimneys"

the window architects use for their own homes!...

WHIZZER



*Detroit-area home of a well-known midwestern residential architect**

For their own homes, architects specify Whizzer Windows because of their esthetic qualities and every-day-living features.

Their ultra-modern geometric design, narrow deep sections and maximum visibility, naturally delight the architectural eye.

Double-glazed insulation, exclusive no-draft V-Shape Interlock at meeting rail, lifetime feather-glide action from stainless-steel bearings, exclusive automatic bolt-lock, and screens removable from the inside . . . are a few practical modern features which are very appealing.

Now, add the fact that Whizzer prices prove their value . . . and you know why architects specify Whizzers for their own homes, as well as their clients'! . . . You will be surprised at how little more it costs to obtain the very best!

Let us quote on your next residential, commercial, multiple-housing or industrial project.

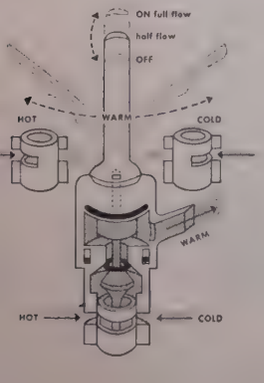
*Name furnished on request

WHIZZER

ALUMINUM HORIZONTAL GLIDING WINDOW
Whizzer Industries Inc.
354 S. Sanford St., Pontiac, Michigan

The ultimate in High Fashion for kitchens and baths...
MOEN FAUCETS





FIRST—with one handle controlling both temperature and flow.

FIRST—with one piston operation, closing *with* instead of against the water pressure.

FIRST—with water seal of specially designed neoprene "O" ring, double sealed against leak or drip.

FIRST—in sales appeal—the one PLUS feature that women can touch, operate, actually demonstrate to themselves that your homes are planned for the future!

For color brochure write or wire:

MOEN VALVE COMPANY
Division of Standard Screw Company
377 WOODLAND, ELYRIA, OHIO

Advertisers index:

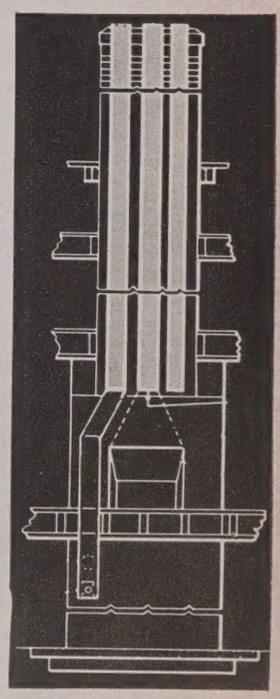
Page:	
68	Acme Building Materials, Inc. *(Precision Homes Division)*
186, 187	Ador Sales, Inc.
48	Airtemp Division *(Chrysler Corp.)*
214	Allen Industries, Inc.
267	Alliance Ware, Inc.
210	American Biltrite Rubber Co.
117	American Brass Co.
15	American Kitchens Div. *(Avco Mfg. Corp.)*
7	American Motors Corp.
188A-B	American Photocopy Equipment Company
288	American Screen Products Co.
295	American Sta-Dri Company
68A	American Welding & Mfg. Co.
5	American Window Glass Co.
56, 57, 252, 253	Andersen Corp.
268	Arcadia Metal Products
220	Arco Company, The
63-65, 218, 219	Armstrong Cork Co.
13	Arrow-Hart & Hegeman Electric Co., The
52	Asbestos-Cement Products Assn.
23, 115	Bakelite Co. *(Division of Union Carbide & Carbon)*
112, 113	Bell & Gossett Co.
294	Bessler Disappearing Stairway Co.
66	Bettinger Enamel Corp.
248	Bostitch, Inc.
69	Briggs Mfg. Co.
280	Broan Manufacturing Co., Inc.
289	Bruce Co., E. L.
118, 119	Bryant Division *(Carrier Corporation)*
121	Bull Dog Electric Products Co.
282	Burnham Corp.
188	Calder Mfg. Co.
275	California Redwood Association
229	Caloric Appliance Corp.
227	Canvas Awning Institute & National Cotton Council, The
118, 119	Carrier Corporation *(Bryant Division)*
203	Carrollton Manufacturing Co.
46, 47	Celotex Corp., The
53	Chase Brass & Copper Co.
48	Chrysler Corp. *(Airtemp Division)*
32	Clad-Rex Steel Co.
299	Clay Flue Lining Institute
8	Committee on Steel Pipe Research
294	Condensation Enginering Corp.
6	Continental Screen Co.
246, 247	Crane Co.
197	Creo-Dipt Co., Inc.
244	Crossett Lumber Co.
289	Curtis Companies Service Bureau
201	Delco Appliance Division *(General Motors Corp.)*
212	Dodge Cork Company, Inc.
290	Donley Bros. Co.
224, 225	Douglas Fir Plywood Assoc.
230, 231	Dow Chemical Co., The
77	DuPont De Nemours, E. I.
295	DUR-O-WAL
76	Dwyer Products Corp.
296	Earth Equipment Corporation
293	Effron Mfg. Co., Theodore
206	Elastizell Corp. of America
Cover III	Eljer Co.
71	Emerson Electric Mfg. Co.
281	Fabrow Mfg. Inc.
108, 109	Fenestra, Inc.
27	Fiat Metal Mfg. Co.
9	Flintkote Co., The
21	Follansbee Steel Corporation
51	Formica Co., The
60, 61, 215	Frigidaire Division *(General Motors Corp.)*
88B-C, 92, 93, 211, 242, 243, 266	General Electric Co.
50A-50D	General Electric Co. *(Hotpoint Company, Div. of)*
201	General Motors Corp. *(Delco Appliance Division)*
60, 61, 215	General Motors Corp. *(Frigidaire Div.)*
297	General Products Co.
287	General Tire & Rubber Co., The *(Bolta-Floor Division)*
67	Geneva Modern Kitchens
271	Georgia Pacific Plywood Co.
296	Gerber Plumbing Fixtures
31	Given Mfg. Co.
274	Glass Shower Door Co., Inc.
Cover II	Gold Seal Division *(Congoleum-Nairn, Inc.)*
241	Goodrich, Company, B. F. *(Flooring Division)*
14	Grant Pulley & Hardware Co.
288	Graham Industries, Inc.
290	Habitant Fence, Inc.
10	Hager & Sons Hinge Mfg. Co., C.
35	Hall-Mack Co.
277	Halstead & Mitchell
216, 217	Harbor Plywood Corporation
19	Hardwick Stove Co.
221	Harnischfeger Homes, Inc.
189	Heritage Homes
272	Hobart Mfg. Co., The
276	Holcomb & Hoke Mfg. Co., Inc.
50A-50D	Hotpoint Company *(Div. of General Electric Co.)*
202	Hough Shade Corp.
208	House & Garden
286	House & Home
28	Inland Homes Corp.
72	Inland Steel Products Co.
96, 97	Insulite Division *(Minnesota & Ontario Paper Co.)*
29	International Harvester Co.
273	Janitrol Heating and Air Conditioning Division *(Surface Combustion Corporation)*
82, 83	Johns-Manville
234, 235	Kawneer
36	Kelvinator Div. *(American Motor Corp.)*
274	Kennatrack Corp.
222, 223	Kennecott Copper Corp.
26	Kentile, Inc.
11	Kewanee Mfg. Co.
100, 101	Keystone Steel & Wire Co.
296	Kiefer Tanneries
32	Kimberly-Clark Corp. *(Cellucotton Div.)*
238	Lau Blower Co., The
34A-34H	Lennox Furnace Co.
286	Leslie Welding Company Inc.
30	Lewyt Air Conditioner Corporation
22	Libbey Owens Ford Glass Co.
233	Life
120	Line Material Co., *(Division of McGraw Electric Co.)*
104	Marsh Wall Products, Inc.
12, 263	Masonite Corp.
120	McGraw Electric Co. *(Line Material Co. Div.)*
198	Meadows, Inc., W. R.
296	Midget Louver Co.
236	Midwest Houses, Inc.
239	Milwaukee Stamping Co.
86, 87	Minneapolis-Honeywell Regulator Co.
111	Minnesota Mining & Manufacturing Co.
96, 97	Minnesota & Ontario Paper Co. *(Insulite Division)*
213	Moe Light Division *(Thomas Industries, Inc.)*
297	Moen Valve Co.
70, 285	Monsanto Chemical Co.
255	Mosaic Tile Co., The
294	Mosley Electronics, Inc.
20	Mueller Climatrol
291	Mutschler Bros. Co.
265	National Clay Pipe Mfrs., Inc.
24, 228	National Gypsum Co.
Cover IV	National Homes Corp.
205	National Lock Company
249	National Oak Flooring Mfrs. Assn.
16, 17	National-U. S. Radiator Corporation
4	National Vanity *(Affl'. w/National Stove-Kitchens-Door)*
200	New Castle Products, Inc.
206	Nichols Wire & Aluminum Co.
1	Nutone, Inc.

Page:	
280	Onan & Sons, Inc., D. W.
102	Orangeburg Mfg. Co., Inc.
192A-D	Owens Corning Fiberglas Corp.
89	Pacific Lumber Co., The
195	Paine Lumber Co., Ltd.
256	Pass & Seymour, Inc.
257	Perfection Industries, Inc.
193	Per-Fit Products Corp.
122	Perma Products Company, The
185	Ponderosa Pine Woodwork
68	Precision Homes Div. *(Acme Building Materials, Inc.)*
237	Progress Manufacturing Company
3	Pyramid Instrument Corp.
289	Ramset Fastening System *(Shure-Set)*
283	Ready Hung Door Corp.
300	Red Cedar Shingle Bureau
91	Reflectal Corp.
80	Remington Arms Co., Inc.
78, 79, 196	Republic Steel Corp.
284	Revco, Inc.
245	Revere Copper & Brass, Inc.
88D	Reynolds Metals Co.
254	Richmond Radiator Co.
226	Robbins & Myers, Inc.
260	Rowe Manufacturing Co.
207	Ruberoid Co., The
2	Roper Corporation, George D.
204	Russell Co., The F. C.
295	S. K. Laboratories, Inc.
74, 75	St. Paul & Tacoma Lumber Co.
68B	Samuel Stamping & Enameling Co.
264	Sargent & Co.
54	Scholz Homes, Inc.
199	Servel, Inc.
268	Shana Manufacturing, Inc.
88A	Silvercote Products, Inc.
232	Silcrest Company
33	Simpson Logging Co.
212	Southern Pine Association
18	Sterling Hardware Mfg. Co.
99	Sun Valley Industries Inc.
286	Symons Clamp & Mfg. Co.
213	Thomas Industries, Inc. *(Moe Light Division)*
38, 39	Tile Council of America
261	Tile Tex Division *(The Flintkote Co.)*
23, 115	Union Carbide & Carbon Corp. *(Bakelite Corp., Division of)*
190, 191	United States Gypsum Co.
88	United States Plywood Corp.
105	Universal Atlas Cement Co.
58	Universal-Rundle Corp.
34	Uvalde Rock Asphalt Co.
95	Van-Packer Corp.
81	Virden Co., John C.
262	Wasco Products, Inc.
240	Washington Steel Products, Inc.
251	Waterman-Waterbury Co., The
258	Weatherstrip Research Institute
106, 107	Westinghouse Electric Corp.
292	Weather Wizard Aluminum Mfg. Corp.
284	Weis Manufacturing Company
270	Welbilt Corporation
291	Western Pine Assn.
293	Westway Homes
50, 269	Weyerhaeuser Sales Co.
209	Whirlpool-Seeger Corporation
297	Whizzer Industries, Inc. *(Glidemaster Div.)*
25	Williamson Company, The
62	Wiegand Co., Edwin L.
250	Willingham-Little Stone Co.
282	Wiremold Company, The
42, 43	Wood Conversion Co.
116	Worthington Corporation
259	Wright Manufacturing Company *(Division of Mastic Tile Corp. of America)*
278, 279	Yale & Towne Mfg. Co., The

Put *Extra Sales Appeal* in Your New Home!



—for Added Fire Protection!



One out of every five destructive fires results from faulty chimney flue and furnace installations! **That's why Clay Flue Lining is the mark of a quality home—with important extra sales appeal for any buyer. It's 100% fireproof—can't crack or melt under heat. And its smooth inner surface can't accumulate dangerous quantities of soot. Be sure to specify Clay Flue Lining in every home you build, and use this important safety feature to help you sell.**

CLAY FLUE LINING *Institute*

You Can Trust This Mark of Quality

MODULAR FLUES

Write for "Recommendations for Chimney and Flue Lining Construction," containing sizes, dimensions and details on modular flues. This Bulletin also is a manual for safer chimney construction and a practical guide for those concerned with design and construction.

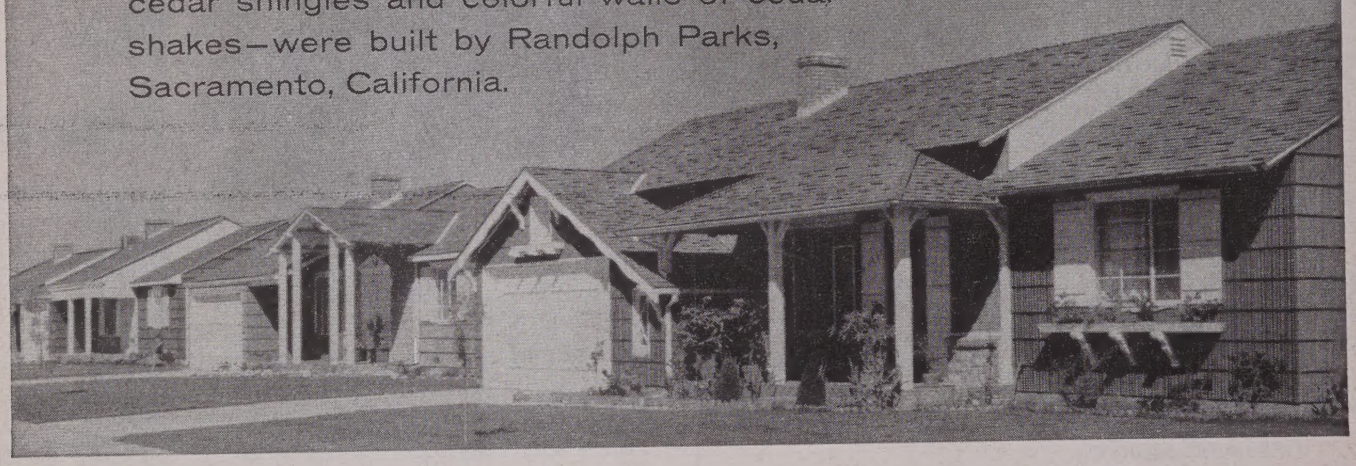
CLAY FLUE LINING INSTITUTE
161 Ash Street, Akron 8, Ohio

CONTACT AN INSTITUTE MEMBER WHEN YOU WANT THE BEST

American Vitrified Products Co., Cleveland 14, Ohio • Dee Clay Products Co., Inc., Bloomingdale, Ind. • The Evans Brick Co., Uhrichsville, Ohio • The Kaul Clay Manufacturing Co., Toronto, Ohio • The Kopp Clay Co., Malvern, Ohio • Larson Clay Pipe Co., Detroit 34, Mich. • Malvern Flue Lining, Inc., Malvern, Ohio • Mill Hall Clay Products, Inc., Mill Hall, Pa. • Natco Corp., Pittsburgh 22, Pa. • Peerless Clay Corp., Toronto, Ohio. FL-456-24A

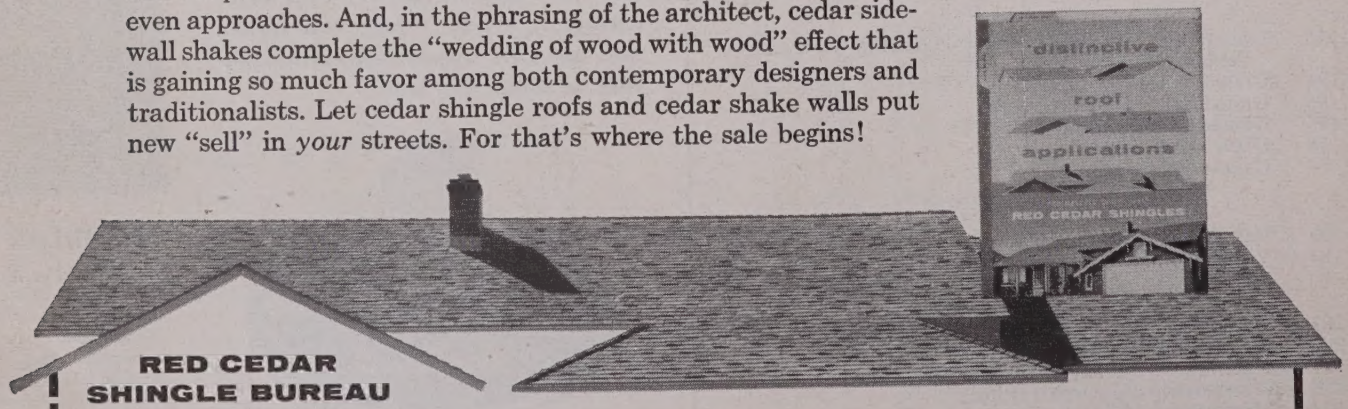
PUT "SELL" IN YOUR STREETS WITH CEDAR

These beautiful homes—featuring textured roofs of cedar shingles and colorful walls of cedar shakes—were built by Randolph Parks, Sacramento, California.



Home buyers everywhere are asking for more *quality*, more *variety*, more that is *genuine* in their new houses. That makes cedar a natural for your basic roof and wall material. Because cedar is the genuine article—the real McCoy! Cedar shingles for roofs give you obvious *quality*... a wide *variety* of application techniques... and the *personable warmth of genuineness* that no other material even approaches. And, in the phrasing of the architect, cedar sidewall shakes complete the "wedding of wood with wood" effect that is gaining so much favor among both contemporary designers and traditionalists. Let cedar shingle roofs and cedar shake walls put new "sell" in *your* streets. For that's where the sale begins!

Send for this new full color book, *showing how you can achieve a variety of roof textures and a wealth of roof character using standard red cedar shingles.*



RED CEDAR SHINGLE BUREAU

5510 White Bldg., Seattle 1, Wash.
550 Burrard St., Vancouver 1, B. C.

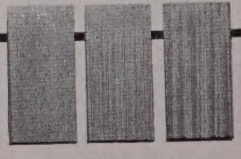
Gentlemen: I'm interested in ideas for increasing the visual impact of my roofs. Please send my free copy of "Distinctive Roof Applications."

Name_____

Firm_____

Address_____

City_____ Zone_____ State_____



YOUR BEST "OUTSIDE SALESMAN" IS CEDAR



Clear "sailing" with this children's bathroom idea by ELJER!

Now! Eljer launches an all-out advertising and promotion drive to tell your prospects that this children's bath is more than a second bath. It's a practical, hard-selling idea from Eljer that's certain to move your houses faster . . . certain to brand you as a man who builds more value into his homes.

Look to Eljer fixtures and brass goods for more quality in the homes you build . . . for the extra sales-appeal of smart styling, skilled workmanship, and lasting durability. Eljer Division of The Murray Corporation of America, Three Gateway Center, Pittsburgh 22, Pennsylvania.



Choose from six lovely fashion-keyed colors and snowy white

ELJER

DIVISION OF THE MURRAY CORPORATION OF AMERICA

Guaranteed by Good Housekeeping

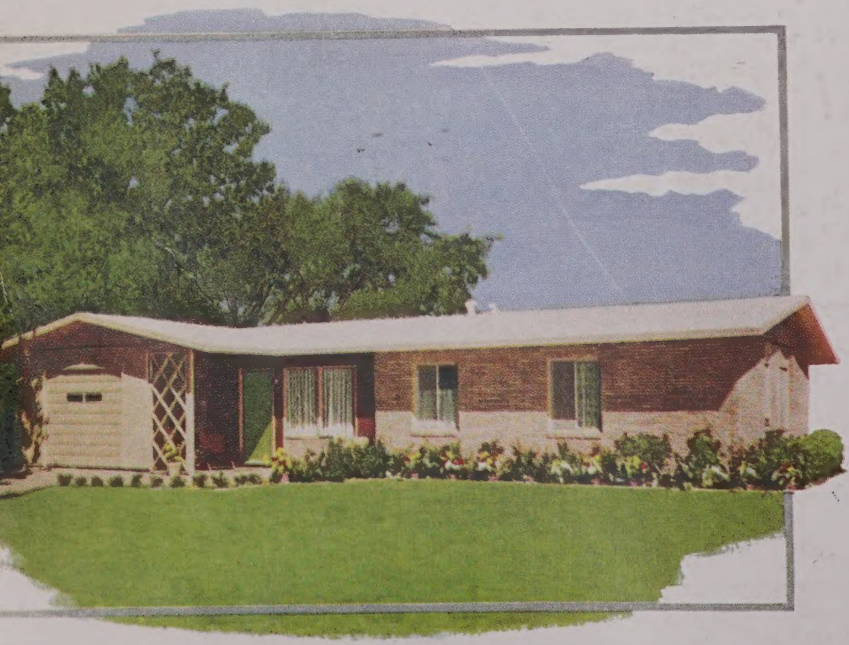
ELJER—the only name you need to know in plumbing fixtures



You can BUILD TO YOUR MARKET with National Homes



Every National Homes builder-dealer, regardless of his location, enjoys tremendous competitive advantages. He can build to his market in a wide range of designs, and prices . . . offering far more in exterior styling, interior features, and all-around living convenience. By actual comparison, the National Homes builder-dealer can offer more house for the money—*anywhere!* This is one of the big advantages helping National Homes builder-dealers win an ever increasing share of the market.



SOME OF THE MANY OTHER ADVANTAGES ARE:

- **Trained Organization** to assist with land acquisition, site planning, and the dealer's entire building program.
- **House Package** that represents two-thirds of the building job. This is delivered to the site on schedule for the most economical use of local labor. There is no need for warehousing or inventory.
- **Faster Completion Time** that means a more rapid turnover of capital and higher dollar volume of profit.
- **Favorable Financing** of VA or FHA-Approved Mortgages by the National Homes Acceptance Corporation and more than 600 leading financial institutions.
- **Advertising and Sales Promotion,** on national and local levels, of our brand-name National homes.
- **Homes Professionally Designed** by Charles M. Goodman, AIA, and color-styled by Beatrice West, foremost authorities in the home field.
- **Dozens of Floor Plans** and hundreds of exterior variations to suit every need and desire.
- **Homes Produced Better** and more economically . . . by modern assembly-line methods . . . which means a lower selling price.
- **Mass Purchasing** of brand-name materials results in higher quality and in important savings that are passed on to the home-buyer.
- **All the Advantages** of a 25,000-house-a-year builder regardless of the size or location of his community.

For more details on how you may join the most successful home building team in the country with a National Homes builder-dealer franchise contact me personally. JAMES R. PRICE, *President*, National Homes Corporation, Lafayette, Indiana.

ONE OUT OF EVERY 48 HOMES BEING BUILT IN AMERICA TODAY IS PRODUCED BY...

nh National HOMES